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ABSTRACT

A project to demonstrate and evaluate some innovative programs utilizing volunteers in work with the handicapped and to provide data on the success of present programs is discussed. As part of the project, four pilot projects were undertaken to determine the feasibility and utility of certain approaches and to develop model training courses that could be taught to volunteers in general or to college student volunteers. The four pilot projects were: (1) a project to introduce handicapped persons into Junior Achievement companies as a means of developing and modifying attitudes on the part of program directors and co-workers; (2) training of volunteers in behavior management techniques to determine whether the behavioral problems arising from handicapped interactions, especially those having to do with excessive dependency and claims for support could be managed with modern behavior management methods; (3) the teaching of behavior management techniques to supervisors at Goodwill Industries to assist with worker "motivation" and "cooperation" problems; and (4) the training of parents of underprivileged children in a day-care center in the management of child behavior. The results of these pilot projects showed that volunteers did not differ substantially from nonvolunteers in attitude or personality, as measured by test. It was also found that the attitude of volunteers toward the handicapped did not improve with experience. In the Junior Achievement groups, experience may make attitudes more negative or more realistic. Students can be successfully utilized as volunteers. Integrating the handicapped with volunteers in social-recreational settings has positive benefits. (DB)

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Final Report

Community Human Resources Development in the Rehabilitation of the Handicapped

by:

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1700 Hayes Street
Nashville, Tennessee 37203

September, 1972

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Significant Findings

A film providing a general picture of Outlook Nashville's program was made and prints are available on loan to other groups interested in viewing the film.

A Recreation Manual was written describing games and activities for handicapped individuals.

Practicum students in college can be successfully utilized as volunteers when adequate supervision is provided and appropriate settings for volunteer activity are available. Timing which coincides with the school calendar is also important, and the problem of program disruption when students finish a semester must be considered in such utilization. Similar projects should work with high school students, but in our attempt to utilize them, scholastic credit was not given, and the dropout rate was extremely high.

Training volunteers should be directed toward the work they will do. Providing training without giving volunteers assignments and following-up their activity is wasteful of resources. General training courses can be used to provide general education for the community, but they are inefficient for recruiting volunteers.

In no case did attitudes toward the handicapped improve following experience with them. In most cases, there was no change in attitude, and in Junior Achievement where participants had not volunteered to interact with the handicapped, attitudes became more negative. The instruments used to measure attitudes have some problems, and it may be that unrealistic positive attitudes reported initially become more realistic through experience with the handicapped and are scored as more negative attitudes. In any case, projects such as this one should not be utilized if the goal is improving attitudes toward the handicapped. Volunteers do receive other rewards from work in such programs as evidenced by their positive attitudes toward the program and their continuation as volunteers.

Education may provide a means of improving attitudes toward the handicapped. A correlation was found between understandability of a handicapping condition and positive evaluation of the condition. Assuming that education can increase understandability, positive evaluation should increase as well.

Handicapped teenagers are easily integrated into the standard Junior Achievement program utilizing special education students as advisors and agency liasons. The teenagers were primarily blind or delinquents from correctional institutions. Future attempts to involve mentally retarded teenagers appear feasible.

Handicapped people tend to be socially isolated. Social-recreational programs such as Outlook Nashville's provide a needed avenue of social contact. Through this social contact, social skills are acquired and interaction between handicapped and Lookouts is facilitated. Project data clarify these principles and offer suggestions for program development and further study.

Research Brief (Grant No. RD-12-P-55167/4-01)   September 1972

Community Human Resources Development in the Rehabilitation of the Handicapped

Outlook Nashville, Inc.

The project was initially designed to explore additional methods of developing community participation in Outlook Nashville's programs of social and recreational services for the handicapped. In addition, objective data was to be gathered to evaluate program output and to assist other groups in developing similar programs.

In the first year of the project the concentration was on agency and program reorganization, exploring new programs, and researching a variety of aspects of the volunteer system. With the second year renewal came a mandate to shift emphasis from the study of volunteers to the study of the handicapped participants. Observational studies of handicapped interaction in the major program, TNT Clubs (social-recreational clubs consisting of half handicapped and half volunteers, called Lookouts), and an experimental project where the handicapped were recruited for Junior Achievement were begun. Premature termination of the grant forced exploratory measures which were being prepared for the final year to be utilized for procuring measures of final outcomes.

Implications for Action

A film providing a general picture of Outlook Nashville's program was made and prints are available on loan to other groups interested in viewing the film.

A Recreation Manual was written describing games and activities for handicapped individuals.

Practicum students in college can be successfully utilized as volunteers when adequate supervision is provided and appropriate settings for volunteer activity are available. Timing which coincides with the school calendar is also important, and the problem of program disruption when students finish a semester must be considered in such utilization. Similar projects should work with high school students, but in our attempt to utilize them, scholastic credit was not given, and the dropout rate was extremely high.

Training volunteers should be directed toward the work they will do. Providing training without giving volunteers assignments and following-up their activity is wasteful of resources. General training courses can be used to provide general education for the community, but they are inefficient for recruiting volunteers.

In no case did attitudes toward the handicapped improve following experience with them. In most cases, there was no change in attitude, and in Junior Achievement where participants had not volunteered to interact with the handicapped, attitudes became more negative. The instruments used to measure attitudes have some problems, and it may be that unrealistic positive attitudes reported initially become more realistic through experience with the handicapped and are scored as more negative attitudes. In any case, projects such as this one should not be utilized if the goal is improving attitudes toward the handicapped.

Volunteers do receive other rewards from work in such programs as evidenced by their positive attitudes toward the program and their continuation as volunteers.

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Handicapped teenagers are easily integrated into the standard Junior Achievement program utilizing special education students as advisors and agency liasons. The teenagers were primarily blind or delinquents from correctional institutions. Future attempts to involve mentally retarded teenagers appear feasible.

Since handicapped people tend to be socially isolated, social-recreational programs such as Outlook Nashville's provide a needed avenue of social contact. Through this social contact, social skills are acquired and interaction between handicapped and Lookouts is facilitated. Project data clarify these principles and offer suggestions for program development and further study.

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Preface

This report represents two years' work in expansion and evaluation of Outlook Nashville's program. The major work in writing the report was done by Richard Blanton, Linda Pollchik, Janice Robinson, and Barbara Wallston, but many other people contributed to sections of the report.

The research could never have been accomplished without the cooperation of the service staff at Outlook Nashville (particularly Jo Helton Wintker, Janice Bradley, and Lee Humphreys) and the many volunteer workers, especially the club sponsors, who completed questionnaires and put up with our disruptions. In addition, we greatly appreciate the assistance of Richard Barcomb, executive director, Junior Achievement of Nashville, Inc., in trying out an experimental program and allowing us to evaluate the program. Most of the work at Junior Achievement was carried out by Martha Carroll with the assistance of Pam Mickle who trained and coordinated observers, Nancy Fleming, Rebecca Semanack, Jamie Smith, and Joy Stambaugh who served as consultants to the advisors, and Jane Dowden, Nancy Fleming, and Mary Johnston who served as observers.

Another experimental project was begun at Father Ryan High School by Maria Hannel. With the assistance of Lee Hannel and the cooperation of Fathers Dickman and Johnston, she recruited volunteers to work with Outlook Nashville. Willa Kimbro put a great deal of effort into trying to expand Outlook Nashville's program into North Nashville, a primarily black neighborhood. Ray Wintker worked on expanding the use of behavior modification by volunteers and Lee Goodner served as a consultant to this project. Khawer Sultana worked with clubs on recreation programs and wrote a recreation manual for the sponsors. The sections of the report dealing with each of these innovative programs were written by the person in charge and edited by the report authors.

Attitude instruments were important in a number of the reported studies. Arthur Robins and Jum Nunnally provided valuable assistance in evaluating attitude instruments and modifying the semantic differential for our purposes. Another attitude instrument which was used (the SPAI) was developed by Barbara and Kenneth Wallston, with the assistance of Phyllis Goldstein, Executive Director, Central Wisconsin Chapter of the National Multiple Sclerosis Society, 1968-1970.

Data analysis was carried out by Linda Pollchik, Janice Robinson, and Barbara Wallston. Jane Connor served as a consultant on statistical problems and did some programming for us.

A major section of the report deals with observation data collected at TNT Clubs. Gene Edgar provided valuable assistance in developing the observation code and training observers. We'd also like to thank Gay Barber, Lyle Dement, Marianne Dineen, Gayle Douglas, Madeline Fulton, Judith Gempf, Virginia Klemkowski, Jotisna Paul, Muzafar

Akhtar Rana, Becky Rothenberg, Minal Singh, Linda Ulrich, and Betty Vestal for serving as observers. Town Hall, Linda Pollchik, and Barbara Wallston supervised the observers.

Most of the programs required training courses for volunteers. Keith Quirk developed and presented most of the courses with the assistance of other staff members. He wrote most of the section dealing with these courses.

Following the introduction and project history written by Richard Blanton, the body of the report has been divided into five sections. Each section is independent and parts of some sections have been written as separate papers, so there is some repetition of background information.

The first section deals with the Organization and Development of Program and Materials. The reorganization of Outlook's structure based on a systems analysis by Jim Raney is described. In addition, there are descriptions of the pilot programs already mentioned, a summary of available information on TNT Clubs by Linda Pollchik, and descriptions of new materials which have been developed.

The next section deals with Instrumentation. The two main attitude scales utilized (the SPAI and the semantic differential) are described in detail and other measuring instruments used are discussed.

The various studies in which Attitudes Toward the Disabled[1] were investigated are detailed in the next section. Janice Robinson was primarily responsible for these studies which deal with the effects of experience with the disabled on attitudes.

The next section covers a number of aspects of Volunteers. One study investigating the characteristics of volunteers was carried out by Barbara Wallston with assistance from Richard Blanton and Janice Robinson. Interviews were carried out with Lookouts and the results bearing on the assessment of recruitment and training activities are reported by Janice Robinson. The remainder of the section is less data based and covers aspects of recruitment (Maria Hannel), behavior modification training (Ray Wintker), use of college practicum students (Barbara Wallston and Martha Carroll), and some general issues relevant to training and other work with volunteers (Richard Blanton, Janice Robinson, and Keith Quirk).

The final section reporting studies covers effects of programs on the Behavior of the Disabled. Two major programs, TNT Clubs and Junior Achievement, are discussed by Barbara Wallston and Martha Carroll, respectively. Observations of the disabled are the primary data used in this section.

The report concludes with Discussion and Conclusions by the authors.

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[1] Although the preferred language is people with disabilities, the shorthand phrase, the disabled or disabled people will be used throughout this report for convenience. Also handicapped and disabled will be used interchangeably.

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Abstract

The project was begun to demonstrate and evaluate some innovative programs utilizing volunteers to work with the handicapped, and to provide data on the success of present programs.

No evidence was found that volunteers differ substantially from non-volunteers in attitude or personality as measured by paper and pencil tests. Contrary to expectation, the experience of volunteers in working with the handicapped does not improve their attitude toward the handicapped; for non-volunteers (in this instance, Junior Achievers who had handicapped members placed in their companies), experience may make attitudes more negative or more realistic.

Students can be successfully utilized as volunteers with adequate supervision provided, especially if school credit can be given for volunteer work. Behavior management can be taught to such non-professionals and used successfully in work with the handicapped.

Integrating the handicapped with volunteers in social-recreational settings has positive benefits. Observational data in TNT Clubs shows more interaction by the handicapped later in the year suggesting increased socialization. However, dependency and disproportionate interaction with adults rather than peers still exist in our settings. Ratings by club sponsors provide additional evidence for these findings. Club members and their families recognize the social isolation of the handicapped and the positive benefits provided by TNT Clubs in alleviating this.

Integration of handicapped and non-handicapped in more task oriented settings, such as Junior Achievement, is also feasible and provides positive benefit, again primarily in social skills learning.

Introduction and Project History

Historical Development of the Outlook Nashville Program

In 1952, a citizens action committee in the Nashville community found that all existing private and public agencies in the city placed restrictions of age, diagnosis, financial or social status, religious affiliation, sex or other classificatory requirements on the provision of services. A need existed for a coordinating agency to provide comprehensive social rehabilitation of its handicapped members. It was chartered as a non-profit educational and charitable organization in 1959.

In the fall of 1960, the agency was requested by parents of cerebral palsied twins to initiate a program to train sitters for handicapped children. The challenge was accepted with the understanding that all ages and types of disability would be included and that handicapped persons themselves would receive the same training as the non-handicapped whenever possible. An attitude and social skills training course was developed. The course and its philosophy emerged out of attempts to help volunteers learn to meet the needs of the handicapped with whom they were interacting. Such volunteers were called Lookouts, a term designating the responsibility for an attitude of constant concern for needs of less able persons.

It was observed that the occurrence of a handicap in a family often leads to withdrawal of community attention to that family and isolation of its members at a time when community support is deeply needed. This withdrawal is often interpreted as a kindness to the handicapped family. The family is seen by the community as needing anonymity; the family sees itself as sheltering its disabled member from social rejection and embarrassment.

It was concluded that counseling the family and providing assistance in care for the handicapped member were not enough. It seemed necessary to broaden the program to include a range of social and recreational activities in which the handicapped and non-handicapped might jointly participate and which could be employed to bring more of the normal community into contact with the handicapped to its own educational benefit.

One outgrowth of this realization was the program of club organizations called TNT Clubs (for Tots 'n Teens, Teens 'n Twenties, etc.). Located in churches and schools, these clubs consist of equal numbers of handicapped and non-handicapped persons, offices being reserved for handicapped members. It is customary for most club members to take Lookout training courses and to use the club as a base of services to handicapped persons who are homebound. Social and recreational activities are the main program of the clubs, however. Members may become "TV pals" for homebound children, following a schedule of programs on educational television and discussing them over the telephone.

Summer recreation programs co-sponsored by the city parks and Red Cross Youth have followed. Families of handicapped and non-handicapped participate in group camping activities at state parks, and swimming courses, crafts and dramatics courses, remedial education activities and a variety of similar methods have broadened our program during the last eight years.

By 1964 it was clear that the program could no longer be carried on by volunteers alone, and funding was needed to develop the more comprehensive aspects of the program. In that year a three-year Community Health Services Demonstration Grant (No. CH 45-8) was obtained from the Public Health Department of the Department of Health, Education and Welfare to provide a professional staff which would develop the training course, prepare course materials and demonstrations, recruit trainees and develop new opportunities for appropriate volunteer and paid services to handicapped children and adults and their families, especially to the chronically disabled and the aged.

During the period covered by this grant, the program was greatly expanded. A recreational and training center with office and record space was obtained and many of the more innovative programs of the agency, e.g. TNT Clubs, the park, camping and crafts programs, were developed. These have served a very vital purpose: they provide practicum settings in which trainees can apply the insights and skills acquired in the training course and a broader range of social interaction situations in which the handicapped may acquire increased social competence and personal growth.

Outlook Nashville became a United Givers Fund agency in 1967. UGF membership has been of financial assistance, and has helped greatly in our programs of interagency coordination and public relations.

The Present Project

By 1969, the program appeared to have developed a stable and innovative pattern of community services as well as a substantial base of community support. A number of needs were apparent for which funding as well as more expert assistance from volunteers with advanced training were required. Since many volunteers did not feel it necessary to provide data on their activities, difficulties in program evaluation were apparent, especially in the evaluation of effort. While personal report data from handicapped and families indicated that the program was effective in meeting perceived needs, these data were not based on objective observation and could be assumed to lack reliability as indicators of program effectiveness. Accordingly, a proposal was submitted to Social and Rehabilitation Services for a grant to explore additional methods of developing community participation and to acquire a body of objective data which could be used to evaluate the outputs of the program, especially those features for which effectiveness indices could be developed. The project, entitled Community Human Resources Development in the Rehabilitation of the Handicapped and Underprivileged, was funded June 1, 1970, with Mrs. Elsa Ellis as Project Director and Dr. Richard Blanton as Principal Investigator. Mrs. Ellis resigned almost immediately as Agency and Project Director due to the retirement of her husband and pending removal to another state. Miss Jo Helton was retained as agency Executive Director in September, 1970. Since the program, in its existing form, had been largely the work of Mrs. Ellis in development, the problems the change of staff made for the validity of evaluation projects were apparent. Fortunately Mrs. Virginia Fajardo, Director of Training, and Miss Marie Sylvis, Family Consultant, remained ith the program until July, 1971, when the former resigned for reasons of health and the latter for reason of removal from the community.

During the first project year Dr. Penelope Odom served as a part-time principal investigator. A body of general information on the program was obtained, covering participants, history, patterns of service, and criticisms of the program from program participants. On the basis of these data, general plans for program evaluation were drawn up, including a program of psychological testing of attitudes, evaluation and self-concept in program participants with the objective of a three-year program to determine the effect of program participation on these variables.

Certain community agency relationships offered opportunities for developing new models for the use of volunteers, and pilot projects were undertaken. These were: 1) a project to introduce, under the volunteer supervision of college students in special education, handicapped persons into Junior Achievement companies. Nashville's Junior Achievement program, which involves model business experiences for teenagers under the direction of local business executives, is one of the largest in the nation. The introduction of handicapped workers into the companies was seen as a means of developing and modifying attitudes on the part of program directors as well as co-workers. 2) Training of volunteers in behavior management techniques was piloted, using college student volunteers, to determine whether the behavioral problems arising from Lookout-handicapped interactions, especially those having to do with excessive dependency and claims for support often resulting from new volunteer-client interactions could be managed with modern behavior management methods. 3) The teaching of behavior management training techniques to supervisors at Goodwill Industries to assist with worker "motivation" and "cooperation" problems. 4) The training of parents of underprivileged children in a day-care center in the management of child behavior.

Our goals in these pilot projects were to determine feasibility and utility of approaches and to develop model training courses that could be taught to volunteers in general or, in case of need for advanced methods, to college student volunteers.

In the first year, development and expansion of training materials was also undertaken involving 1) the formal organization with audio-visual and printed materials of the basic orientation course, 2) the development of a handbook of guidelines on problems and organization of TNT clubs for the sponsors to use in program planning and development, 3) the development of a manual of recreational activities and group-games for TNT clubs which were suitable for use with handicapped of various types, 4) the contracting for an orientation film to be used with new volunteers and public information media to arouse interest in the organization and illustrate the major values in community building to be obtained with volunteer programs.

For the second project year, Dr. Barbara Wallston was retained as full-time principal investigator and the detailed examination of the major research issues was begun. In January of that year the agency was informed that due to a change in SRS mission objectives the program would be terminated on May 31, 1972. Accordingly, projects for which a third year of work were regarded as essential were re-planned and terminal data collection operations set into the calendar.

The most significant impairment of the project by the early termination occurred in the attitudes study. The projected experimental studies of the effects of volunteer activity on attitudes and amount of information regarding handicapped on attitudes had to be abandoned. Data on the relationship between initial attitudes and probability and frequency of volunteering which were regarded as pilot data for the experimental projects are all we were able to complete. The extensive program of observational rating of social interaction in TNT Club meetings, which was to be the basis of an amplified handbook for club sponsors and revision of training courses, has been, due to the absence of a continuation year, treated as an experimental project using amount of time in the club as an independent variable.

Nevertheless, we feel that the data obtained and the findings of the project are useful, and that they provide a useful framework of methods and problem descriptions for the planning of similar projects in other communities. In addition, our own service program has been substantially strengthened by the challenges which research activity and continual self-examination provide.

Organization and Development of Program and Materials

An Organizational Analysis of Outlook Nashville, Inc.

Since observations indicated that the agency had had some problems with its organizational structure, a study of these problems was undertaken in the summer of 1971. The following report is a result of that study.

Outlook Nashville, Inc. is a system defined by the interactions of the major subsystems: the Board of Directors, the service department, and, during the past two years, the research department. This report deals primarily with the first two subsystems as well as the overall patterns of interaction among the subsystems and environmental influences upon the entire system.

Board of Directors

The *raison d'etre* for the Board of Directors is to support and to monitor the activities of the service and research subsystems and through feedback from these subsystems provide executive direction and control to ensure successful functioning of the agency. The shortcomings of the existing Board of Directors subsystem was studied and a reorganization of the Board structure was proposed.

The most severe deficiencies identified in the Board functioning were: (1) inadequate chain of command for delegation of authority and responsibility; (2) inadequate system of reporting and accounting for use of authority and for meeting responsibilities; (3) inadequate formal statements of agency policies and goals plus inadequate program evaluation; (4) impressions gained by Board members at some point which gave them the idea that volunteering means working whenever they feel like it or have nothing better to do; (5) the use of Board meetings for time-consuming discussions of issues which should have been resolved in committee meetings plus unbusiness-like talk sessions which negatively reinforce professional and working people for attendance at meetings since their time means money to them; (6) diffuse and cumbersome committee setup with interlocking memberships to the extent that the most active members have their time and energies excessively drained while other members are placed on minor committees which never meet; (7) the appointment of *ad hoc* committees to "investigate" and "report" on issues which arise at Board meetings instead of referring the matter to an appropriate committee, with the result that often the *ad hoc* committee never meets and no one thinks to ask for a report at the next meeting.

The reorganizational proposals took the form of a revised Constitution and By-laws. The Board of Directors issues broad policy requirements and restrictions and directs the President in the conduct of the business of the corporation. Under the President are six officers who are in charge of the standing committees, plus two secretaries. Each standing committee chairman should appoint as many subcommittee chairmen as necessary to lead the subcommittees in accomplishing specified purposes and goals. Assisting the standing committee chairman and subcommittee chairmen is a committee secretary in charge of records and written communication for the committee.

The standing committee chairman is to be in frequent communication with subcommittee chairmen and is to attend as many subcommittee meetings as possible. The subcommittee chairmen are to report to their standing committee chairman who in turn, reports to the President, Board of Directors, Executive Director, and Principal Investigator via the Monthly Standing Committee Reports. When questions or problems arise in meetings the President is to refer them to the appropriate standing committee chairman who in turn, may refer the matter to an appropriate subcommittee chairman for action. This is not to be construed as "passing the buck" since the President will hold accountable and responsible his standing committee chairman to whom he refers the matters and the standing committee chairman will hold accountable and responsible his subcommittee chairman in much the same respect that the Board of Directors holds accountable and responsible the President for his actions and inactions. Complaints about lack of cooperation of members or officers are to be taken up the chain of command; social pressure from above upon subordinates shall be the first weapon used to motivate an individual who is disinterested, but asking for the individual's resignation from the Board may be invoked in extreme cases.

The new Board organization will require at least seven officers who are willing to work, who have some feel for what it takes to be a leader, and who can motivate their subordinates to do the job.

Board meetings were set up quarterly in the proposed Constitution so that committee functioning would be emphasized and so that they would not place too large a burden upon busy people in addition to their normal committee work. By restricting each Board member to membership on only one standing committee his efforts may be concentrated in one important area of interest without spreading himself too thin time-wise. The purpose of committees is to do as much of the routine work as possible so that only important matters which warrant the attention of the entire Board are discussed at Board meetings. In addition, functioning standing committees should correct the deficiency of inadequate statements of policy and goals.

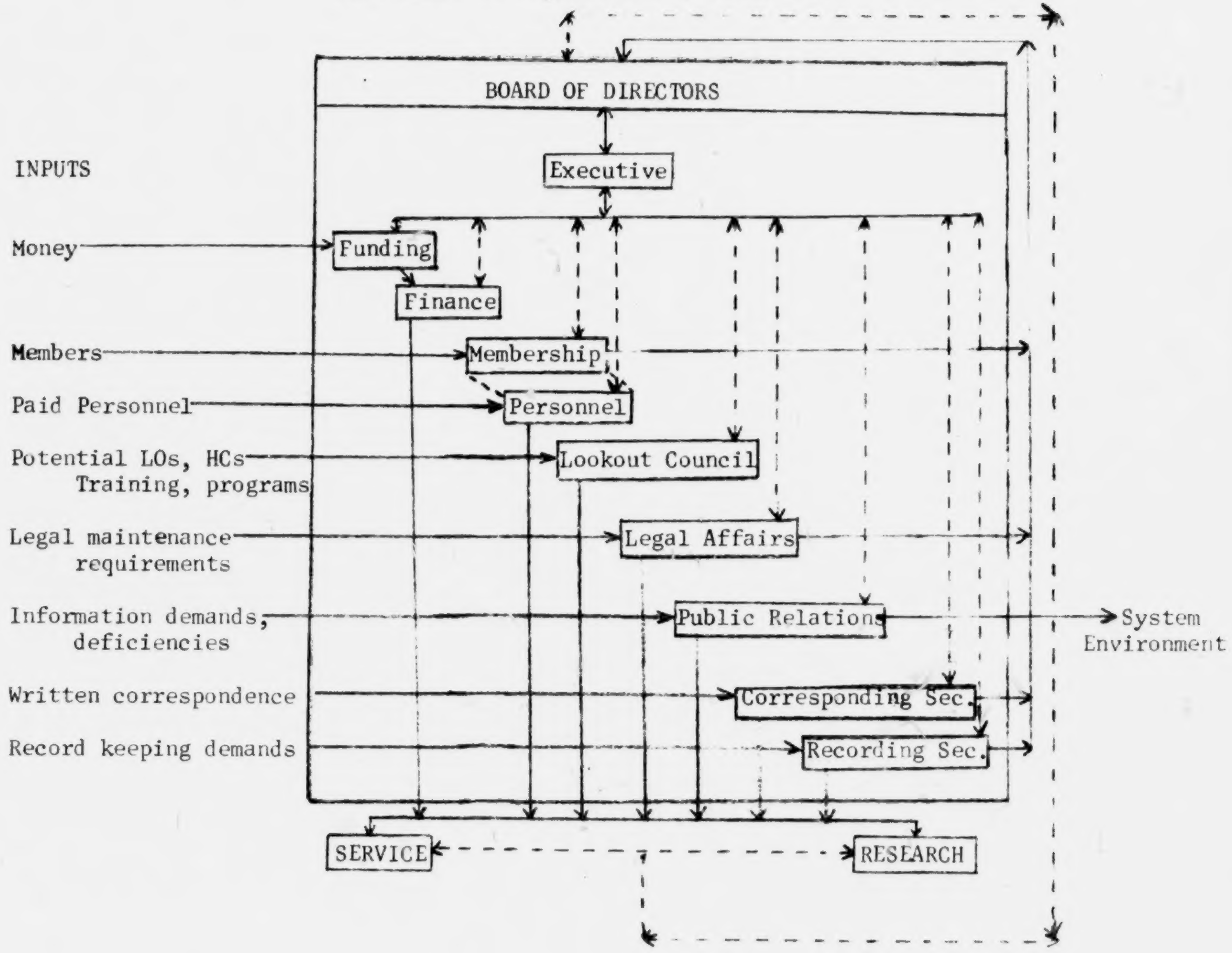
The Board organization was set up so as to delineate responsibility and areas of specialty for handling the various inputs and outputs of the system and for providing feedback information from other subsystems of Outlook Nashville. Figure 1 illustrates the anticipated path of flow for major inputs and outputs and flow of feedback information. Solid lines indicate flow of inputs and outputs and delineate subsystems of Outlook Nashville, and broken lines indicate major lines of communication.

Service System

The service system of Outlook Nashville has attempted to meet the needs of handicapped (HC) clients through interaction with Lookouts (LOs) who are trained by Outlook Nashville. The nature of this interaction is ideally one of understanding friendship. The objective of the training is to create more understanding, while the goal of the intake process is to set up the opportunities for contact between the HC and LO individuals. If services are needed which Outlook Nashville cannot offer, some attempt has been made to refer the HC person to an appropriate agency. The problems involved in delivering services to HC persons on a county-wide basis were studied and some recommendations and suggested experiments were proposed.

Figure 1

Flow Chart of Organizational Structure


BOARD OF DIRECTORS
INPUTS
Executive
Money
Funding
Finance
Members
Membership
Paid Personnel
Personnel
Potential LOs, HCs Training, programs
Lookout Council
Legal maintenance requirements
Legal Affairs
Information demands, deficiencies
Public Relations
System Environment
Written correspondence
Corresponding Sec.
Record keeping demands
Recording Sec.
SERVICE
RESEARCH

The most serious deficiencies identified in the service system functioning were: (1) inadequate funding of the program; (2) inadequate and incomplete record keeping with regard to HC intake forms, LO course-orientation applications, services rendered, training course participants, and related statistics; (3) inadequate follow-up efforts to be sure that services were rendered or that needs have been alleviated; (4) inadequate referral information available to intake personnel with minimum followup information; (5) impractical training course content.

The service system has been limited in the past by an inability to decentralize its functions which would permit effective services on a county-wide basis. Figure 2 illustrates a proposed service delivery system which is based on a collection of neighborhood auxiliary organizations. The theory is that neighborhood resources should be used whenever possible to meet neighborhood needs. Through a process of public education and active recruitment by the Public Relations committee of the Board of Directors, potential lookouts (PLOs) and potential handicapped clients (PHCs) are pulled into the system's two input channels: the training process for LOs and the intake and referral process for HCs. After this initial phase of input processing LOs and HCs move into the service coordination process, which means that they become an active part of their neighborhood auxiliary organizations. Outlook Nashville's liaison with these neighborhood auxiliary organizations is the neighborhood advisor, who may advise three or four neighborhood organizations adjacent to one another in a district of the city. Each of these neighborhood advisors should be equipped with a complete referral information file which should allow her to act as referral agent for her district in the event that the neighborhood organization cannot meet a particular need within the resources of the neighborhood. Also, the neighborhood advisor should coordinate the scheduling of regular basic training courses and special courses for persons in her area and shall coordinate efforts to set up special programs, such as the summer park program, in her area(s).

Research

Priorities for further research were: (1) development and evaluation of training courses because of the importance of the courses to Outlook Nashville's service program; (2) the completion of an information referral system because of the obvious need for an information referral agency in the county and no other agency seemed willing to expend the effort to implement such a service; (3) improvement of record keeping procedures of Outlook Nashville's intake process which now involve considerable redundancy with information recorded in triplicate. Forms need revising and statistical data derived from previously used forms need to be gathered so as to maximize the utility of existing information.

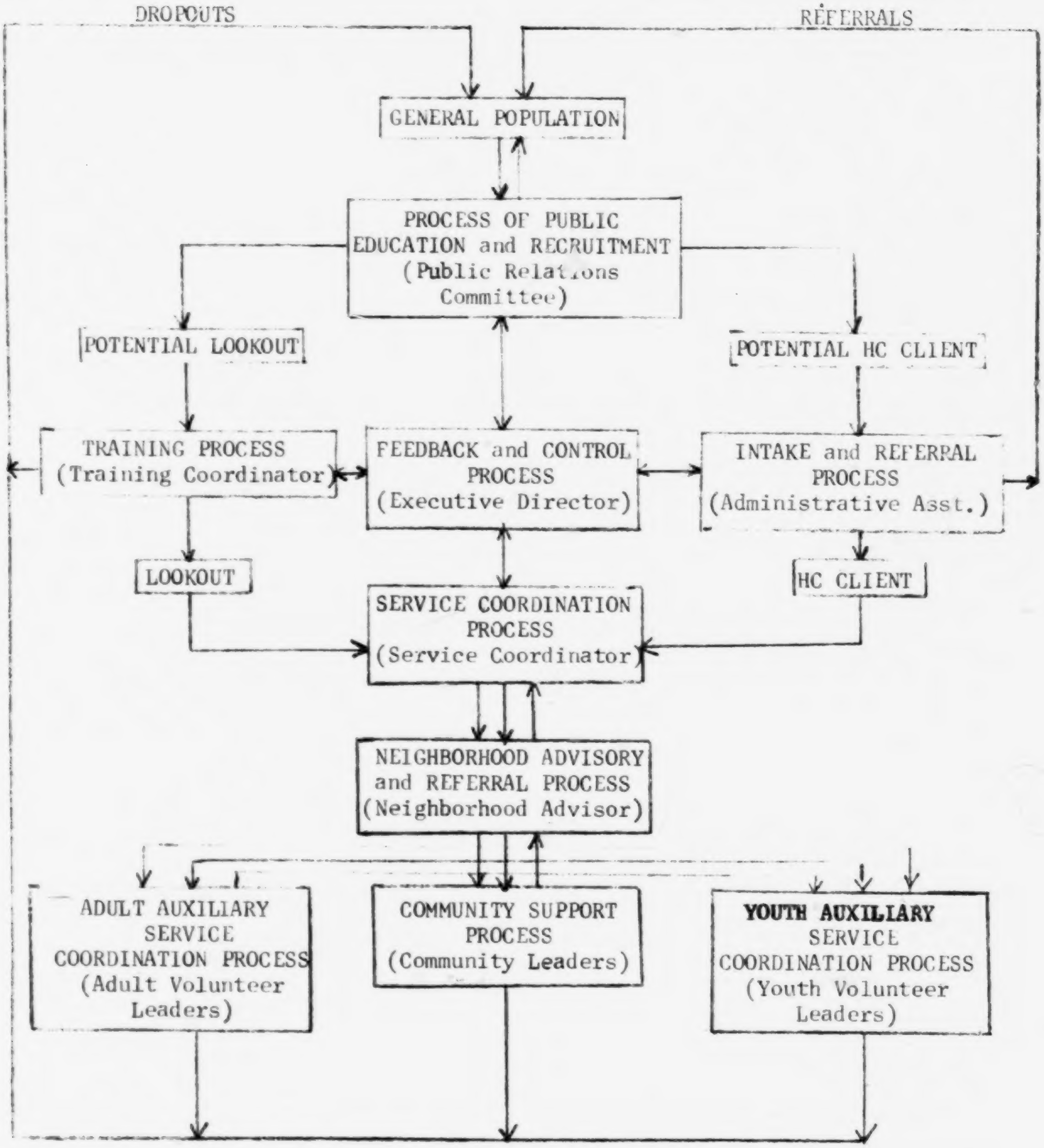
Interactions Among Systems

Ideally, there should be three entities representing each of the major subsystems of Outlook Nashville, and important interactions should take place among the President of the Board, the Executive Director, and the Principal Investigator. These entities should be separate and distinct enough to ensure that information flows into the correct input channel from the systems environment as well as among the subsystems.

It was concluded that the Board of Directors is the key element of Outlook Nashville's system of three elements, yet at the time of the study

Figure 2

Flow Chart of Service Delivery Systems


DROPOUTS
REFERRALS
GENERAL POPULATION
PROCESS OF PUBLIC EDUCATION and RECRUITMENT (Public Relations Committee)
POTENTIAL LOOKOUT
POTENTIAL HC CLIENT
TRAINING PROCESS (Training Coordinator)
FEEDBACK and CONTROL PROCESS (Executive Director)
INTAKE and REFERRAL PROCESS (Administrative Asst.)
LOOKOUT
HC CLIENT
SERVICE COORDINATION PROCESS (Service Coordinator)
NEIGHBORHOOD ADVISORY and REFERRAL PROCESS (Neighborhood Advisor)
ADULT AUXILIARY SERVICE COORDINATION PROCESS (Adult Volunteer Leaders)
COMMUNITY SUPPORT PROCESS (Community Leaders)
YOUTH AUXILIARY SERVICE COORDINATION PROCESS (Youth Volunteer Leaders)

the Board appeared to be the weakest link in the interaction chain.

Summary

Studies of the organization of the agency were completed in September of 1971, and proposals for organizational changes along lines indicated were proposed to the membership. At the November meeting of the county-wide organization membership, the proposed Constitution and By-laws, including the reorganization of the board as proposed in the study, were adopted. The new board and officers took responsibility in January of 1972. The new organizational structure appears to be functioning effectively at the time of termination of the research grant, and the new committee structure appears to be especially effective. A subcommittee on grants of the Funding Committee has been successful in funding an extension of services to the handicapped poor of the East Nashville Housing Projects areas, and the Funding Committee itself has a program under way which appears to have promise of success. Personnel operations and an accounting system have been updated by the Personnel and Finance committees. As this report goes to press, the future of the agency seems assured.

It is concluded that the study of the organization undertaken was effective in leading to solutions of a number of important organizational problems, and that research funds devoted to this purpose were well spent.

Experimental Project with Handicapped Teenagers in Junior Achievement[2]

Pilot Program

Discovering opportunities to transform the handicapped into productive members of society has attracted considerable attention in recent years. Many schools and agencies have developed skill-oriented programs strictly for the handicapped. In these token programs, a specific task is usually taught to a handicapped person who has failed to obtain other employment. The ultimate job is usually in a totally handicapped environment or develops into a menial task that does not take full advantage of a handicapped person's potential.

Programs that actively recruit the handicapped with the intention of integrating them with the non-handicapped on an equal basis are relatively unknown. Most programs do not involve the handicapped at all levels--management, marketing and manufacturing. Junior Achievement (J.A.) provides an opportunity for this integration of the handicapped and non-handicapped in all levels of a business organization. More important, J.A. provides the opportunity for learning before failure in non-school or extra-curricular settings.

In February, 1971, Junior Achievement of Nashville, Inc., began an experimental program to evaluate the possibilities of involving the handicapped on a larger scale than the chance method of previous years. Because many handicapped persons are residents of an institution, the recruitment in the public schools completely excluded these handicapped persons from J.A. For this reason, the Nashville organization recruited persons from three local institutions: Outlook Nashville, Inc., Tennessee School for the Blind, and Tennessee Vocational School for Girls.

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[2] The write-up of the first year of this project is based on a talk presented at the annual conference, Council for Exceptional Children (Carroll, 1972).

Purposes of the experimental project were to evaluate the J.A. program as it exists and determine if changes in program structure were necessary to incorporate handicapped teenagers, and to evaluate the possibilities of expanding the pilot study on a larger scale and for a longer period of time. Secondary purposes were to give the handicapped a preview of a total business and an opportunity to work out solutions to their problems; to give handicapped who had received little contact with persons their own age an opportunity to work with the non-handicapped; and to give the non-handicapped the opportunity to observe the contributions of handicapped youth and thereby form a more realistic attitude toward them.

There were 16 participants during the first year: 5 from Tennessee School for the Blind (3 partially sighted and 2 totally blind); 7 from Tennessee Vocational School for Girls (a state correctional center); and 4 from Outlook Nashville (two were confined to wheel chairs).

Tuesday night was chosen for the first year pilot because of advisor and achiever interest. Only one night was used for ease of control and study.

Four students, majoring in special education at George Peabody College, were selected to coordinate and gather data and counsel advisors. Three types of data were collected. (1) Interviews with achievers and advisors were recorded. They were used to determine the attitudes of persons involved in J.A. (2) Interaction between handicapped and non-handicapped in "on task" and "off task" settings was observed. (3) Task analyses were taken at company work and business sessions and at Trade Fairs. These analyses were used to determine the possibilities of people with a variety of handicapping conditions participating in the J.A. program.

Results. Interviews were conducted with eight achievers working with handicapped. Seven of them felt that the handicapped had been an asset, speeded up production and set an example, while one achiever felt that having the handicapped had not changed the company. All eight achievers felt that there would be no company problems because of the handicapped. Six felt that there would be problems with the physical environment. Eight stated that the program should be continued and six felt that it should be expanded.

Ten achievers working in companies without the handicapped were interviewed. Nine achievers stated the idea was good and would like to work in a company with the handicapped, while one felt that the program would not work. Four felt the contact with the handicapped would change people's attitude. Eight saw the problems with the handicapped to be the same as with the non-handicapped. Two saw that the physical environment might be a problem. Nine felt that the handicapped could do most of the job functions and that other achievers would have no objections.

Eight interviews were conducted with handicapped achievers. All eight were happy to be a part of J.A., citing many factors: knowledge gained concerning a business operation, new friends, a feeling of being useful and having had a responsibility. All felt they had been accepted and were planning to return next year if qualified.

Four advisors working with the handicapped agreed that the program was a success and should be continued next year. Three advisors said handicapped should begin with the rest of the achievers at the beginning of the year, while one advisor felt that handicapped should be placed after companies were formed. All advisors agreed that all the handicapped should be integrated throughout the program and that isolated companies of handicapped would not be advisable. All advisors agreed that the handicapped had made a contribution to their companies in production, morale, and in demonstrating to achievers and advisors that the handicapped are capable.

Of six advisors not working with handicapped, four agreed that handicapped should be integrated, while two said that they did not think it would work, but it should be tried on a trial basis. Six said there would be no objection from achievers. Five felt that there were jobs for them to do. Three stated that changes would have to be made in physical environment, and one felt that advisors would have to keep a close watch on the handicapped.

Interaction Analysis. In four companies containing handicapped achievers, this achiever was observed.

1. Subject "A", female, wheelchair: While on task (sanding blocks) subject interacted with persons concerning task. "Off task" interaction was only with females. It was noted by observers that the males had no eye contact with subject.
2. Subject "B", female, wheelchair: While on task, the subject interacted with all achievers. "Off task" interaction was centered around one person whom the subject had known previously.
3. Subject "C", male, blind: Interaction both on and off task was with one advisor. Little interaction with others. A check into school records showed this pattern was typical behavior.
4. Subject "D", male, blind, black: Interaction both on and off task was with all people in company. It is of interest that this person was elected Vice President of the company.

Task Analysis. Task analyses were taken from manufacturing and selling at a Trade Fair in three companies.

1. Company A: Female, wheelchair: All tasks (i.e. counting money, recording deposits and using machinery) were done with equal amount of efficiency as non-handicapped. Exception--the counter top was too high, therefore, greeting customers and obtaining items from the top of the counter appeared difficult.
2. Company B (company making plaster of paris plaques): Male, blind: All tasks attempted by subject were done with equal efficiency or superior to the non-handicapped. Subject suggested a more efficient way to refinish edges. Knives were used before; subject suggested fine grain sandpaper. This improved the quality of the product and the time-economy efficiency.

3. Company C (company making leather pocketbooks): 3 females, socially maladjusted: All tasks attempted were completed with equal amount of efficiency. Subjects, according to other members of the company, improved production because of enthusiasm to work. The subjects entered during a lag in production and the other members of the company picked up their enthusiasm.

Recap of Pilot Program Analyses. The handicapped participated only one night per week. The achievers' general reaction to the handicapped was one of acceptance. Achievers welcomed the handicapped into their companies, and many felt that the handicapped boosted company morale.

Before the handicapped were integrated into the program, the Nashville J.A. staff discussed with the advisors the feasibility of extending the J.A. program to the handicapped. Each J.A. company voted and unanimously accepted the idea. Admittedly, many were skeptical; decisions had to be made concerning initial placement of the handicapped, and what type of work the handicapped could do. However, the advisors agreed to try the experiment and we have previously noted their positive reaction.

Several definite conclusions can be drawn from the pilot program analysis. Many who initially discussed the program were skeptical, but upon completion of our experiment, we find that the handicapped not only aided in manufacturing, but also increased company spirit. Personal advantages were realized by the advisors as well as the handicapped--three advisors agreed to return the next year strictly on the merits of this pilot program.

We have found that the interaction of the handicapped and non-handicapped achievers was not in and of itself due to the handicapping condition. Achiever interaction appeared no different, nor did interaction between the handicapped and the other achievers.

No task was found that should be considered impossible for the handicapped. Tasks were evaluated in terms of what could be accomplished, not by what could not be done. The handicapped knew their limitations, and did not volunteer for jobs that they could not feasibly accomplish. However, advisors and achievers found that they should not impose "limitations" or under-estimate the abilities of the handicapped students.

Second Year Program

The success of the pilot study led to an expanded second year program. During the second year a total of 39 participants were involved: 13 from Tennessee School for the Blind (6 were totally blind, and 7 partially sighted); 14 from Tennessee Vocational School for Girls; 6 from Spencer Youth Center; 5 from Tennessee Youth Center; and 1 homebound student confined to a wheelchair.[3]

Because of the program's success, three evenings were utilized during the second year with one night left open for controlled study.

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[3] More detailed information on participants is reported in the later section--Behavior of the Disabled.

in order to facilitate the handicapped persons' integration into Junior Achievement, a consultant was provided. The consultant was an undergraduate special education major at George Peabody College for Teachers who was supervised by a graduate student.

The primary purpose of the consultant was to provide support for the adult advisors, non-handicapped achievers, and handicapped achievers in problem solving areas as they related to the handicapped persons' inclusion into company activities. The ultimate goal was to prevent the handicapped person from receiving any non-functional differential treatment and to affect within the advisors and non-handicapped achievers the ability to accept and work with a wider range of abilities.

The consultant was first introduced to the advisor during the training sessions before the Junior Achievement program began. One consultant was provided for each night handicapped persons were at J.A. The consultants and the coordinator had weekly meetings to discuss problems and future objectives. The consultant service was available upon request from the company.

Specific activities of the consultants included: observation in companies for amount, quality, and direction of interaction; consultation with advisors concerning activities of the company; assistance in arranging for transportation to activities away from the J.A. building; consultation with officials of correctional centers about allowable activities; assistance in arranging for selling of products; consultation with parents concerning out of town trips; consultation with handicapped persons concerning specific problems; consultation with the executive director concerning effectiveness of the program; and consultation with other Junior Achievement organizations concerning expansion of the program.

The frequency of use of consultant services is shown in Table 1. The most frequent contact was with handicapped achievers and advisors. Other contacts were made than those included in the table; however, they were not considered relevant to the program.

Table 1

Frequency of Use of Consultant Services

Type of Person	Number of Contacts
Handicapped Achievers	87
Advisors	56
Non-handicapped Achievers	24
Executive Director & Program Director	21
Others	6

Recommendations. The service should be expanded to other Junior Achievement organizations. The same consultant should be used for all nights involved and this person should take a more active part in the training of the advisors. A monthly meeting should be held with the executive director, consultants, and the consultant coordinator. A clearer description of the purpose of the consultant should be given to the advisors.

Limitations and conclusions. Because of the philosophy that the consultants would provide support for advisors and achievers and not be directly involved in decisions, there is no objective way to measure the effectiveness of the consulting service. However, the desire to continue the consultant program is indicative that it was one of the facets which helped make the handicapped achievers' experiences in Junior Achievement a success.

North Nashville Project

This project was designed to involve more extensively the people of North Nashville in helping relationships with their neighbors and to help meet unmet needs of the indigent and ill. The area studied is a low income area, predominately black, including two public housing projects, one privately owned apartment complex and a small number of sub-standard houses, one elementary school which was closed recently, one night school, a play-ground and a community center.

The main purpose of the study was to find the needs of the community and how Outlook's program could be of value in an already heavily researched area with service agencies on almost every corner. To do this, an informal door-to-door survey was conducted. Residents were asked about what problems they had; what agencies were available to help them; did they know of handicapped people in the area, etc. In addition, there was some discussion of Outlook Nashville's program.

Agencies located in or near the area are:

1. Bethlehem Center
2. Child Advocacy Program
3. E. M. R. classes in elementary school
4. Fisk University Breakfast Program
5. Grace Eaton Day Care Center
6. Matthew Walker Health Center
7. Neighborhood Service Club
8. Rat Control Program
9. Watkins Park Community Center
10. YWCA

Most of these agencies employed workers whose main duties were to deal directly with the community yet most of the citizens contacted in the survey seemed unaware of the agencies' existence or of their functions. In addition, it is rare that a client is referred from one of these agencies to another. Everybody was "doing his own thing."

Among all of the programs, no social function serviced the handicapped. This appeared to be the area that Outlook could cover with its TNT Clubs. Outlook Nashville met with the minister of one of the local churches in the area (a member of Outlook Nashville's Board of Directors) to structure a TNT which would encourage sociability between handicapped and non-handicapped, young and old. Work is continuing on beginning such a club.

Finding out where the handicapped were in this area was difficult. One just had to happen upon them. Even the housing project managers were not aware of the number of handicapped people living in the housing units. The question which arises is whether these people were just not looked upon as handicapped people or if the habit of the general public was to look the other way. In some sense, most of this community is handicapped, so the addition of a physical disability or mental retardation is overlooked. There is a strong ethic to "mind one's own business," and this includes not helping as well as not bothering others.

The housing projects have space available for recreational and social activities, but handicapped people cannot currently utilize these facilities. Outlook Nashville could be used to train volunteers to work with these people so they could use existing facilities.

Outlook met with various people from Matthew Walker Health Center to set up a project where Outlook Nashville volunteers would: provide child care aides within the health center for families who must bring their children along while receiving health care; provide bus and car aides for assisting drivers who must transport handicapped individuals to and from the center; and provide assistance to the health aides at the center who must work out in the community in making contacts, baby sitting services, shopping trips, recreational activities, etc. They are badly in need of these services and welcome the concern of Outlook Nashville.

In all of the situations explored, opportunity for some social interaction between the handicapped and the non-handicapped is sorely needed. All of the present programs are geared to the youth, the black, the poor, and a few to the elderly, and the physically and mentally handicapped were forgotten. However, contacting and cooperating with any of the existing agencies was quite difficult. If an appointment was possible (which it frequently wasn't), they dealt in vague generalities but wouldn't come through with concrete possibilities for working together. Each program seems to zealously guard its "piece of the pie;" the worry exists that cooperation will lead to being usurped.

One exception to this was in our late dealings with the Matthew Walker Health Center this spring. Plans were under way to implement a pilot project when notice was received of termination of the research grant. The proposal was therefore postponed. We are confident that there are services to the black community in North Nashville which Outlook Nashville could provide in cooperation with a local agency, such as Matthew Walker. However, this can only be started with some funding, since a full-time staff member familiar with the area would be needed to get such a program off the ground.

Because of some of the special problems in the area, a program in this community would have to vary from Outlook's typical one. The chart in Figure 3 sketches the plans for work in the area. The neighborhood advisor is similar to the family consultants frequently utilized by Outlook. This and other positions might need to be salaried, because the poverty in the area makes it difficult to find volunteers with time. The youth and auxiliary leaders would function somewhat as sponsors and Lookouts. The incentive stipends requested in our budget would probably have been used for some payment to such volunteers had the program begun. The problem of the label "handicapped" is even more delicate here than in other areas, so the possibility of training everyone as Lookouts or Auxiliary Leaders was strongly suggested. Variations in the training program would also have been necessary. The schema proposed forms the basis of a proposal submitted to the Davidson County Human Services Corporation in June, 1972 for funding of a program of such services in the East Nashville area. The Committee on Grants of the Board of Directors concluded, after a review of the evidence provided by the Nashville Housing Authority, that the need was greater in that area. As this report goes to press, notice has been received that this grant has been awarded.

It seems that Outlook's basic philosophy would be useful to North Nashville. However, many variations would be needed to make "transporting" to this section of town viable. Time and money are needed to experiment with such training and program variations. It is hoped that this program in East Nashville can be expanded to include North Nashville in the future.

TNT Clubs

A TNT Club is made up of people working together so that handicapped members of the community may better cope with the attitudes that surround them. This helps them develop the skills necessary to participate more fully in the mainstream of life in the community. These goals are pursued through TNT Clubs, social clubs composed of half handicapped members and half Lookout members, which offer recreation and sheltered social experiences for the handicapped members and opportunities for services and learning for the Lookout members.

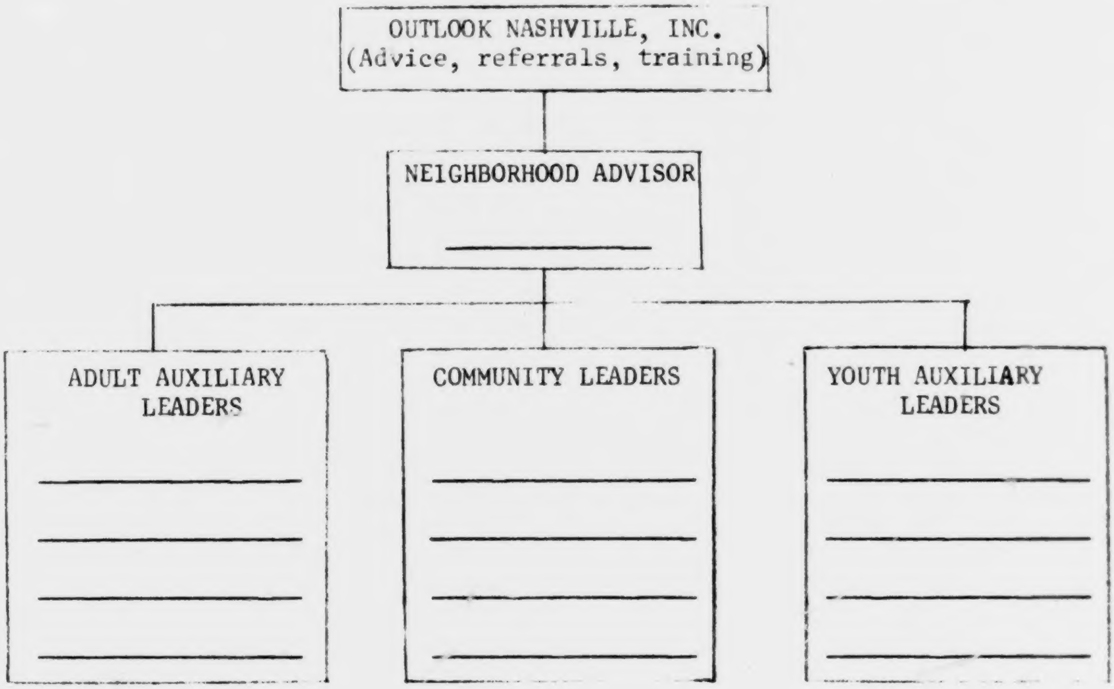
A TNT Club has, in the past, been sponsored by a local church and the club meetings are held monthly (i.e. every first Tuesday, etc.) during non-working hours. The sessions usually last approximately 2 1/2 hours and are composed of both unstructured and structured activities.

A typical meeting begins with a period of greeting and general mingling among members. New people are introduced and the evening's activities are prepared by the sponsors. During this time Lookouts attempt to entertain some of the members by talking or playing games with them. This is followed by the main source of entertainment for the evening which could include one of the following: crafts, film or slides, a speech, a musical group, or group games. During this activity everyone is included and isolates (people who tend to withdraw from the group) are encouraged to participate.

Following this organized group activity, the members are usually

Figure 3

Proposed Organization for Outlook Nashville Program in North Nashville


OUTLOOK NASHVILLE, INC.
(Advice, referrals, training)
NEIGHBORHOOD ADVISOR
ADULT AUXILIARY LEADERS
COMMUNITY LEADERS
YOUTH AUXILIARY LEADERS

1) Determine needs	1) Publicity & support	1) Plan youth programs
2) Allocate resources	2) Clearing house functions	2) Local fund raising
3) Plan programs	3) Financial aid?	3) Cooperate with Adult Aux.
4) Local fund raising	4) Transportation?	4) Home Visits
5) Home visits	5) Employment?	5)
6)	6)	6)
7)	7)	7)
8)	8)	8)

left on their own to mingle, play records, play games, or simply walk around the room. The sponsors take this time to set up and serve refreshments and the members are free to continue their unstructured activities.

Each club has officers who are elected from the handicapped population. They generally conduct the business meeting following the refreshment period. The discussion usually centers around the next meeting's activities.

The session is often closed with a circle and a group song.

Guidelines[4]

Each TNT Club is different, with its personality determined by the people--their talents, needs, and limitations. The following guidelines are meant to be goals toward which to work.

The officers of the club are: president, vice-president, secretary, and treasurer. Only handicapped persons can be officers. Each officer has a Lookout assigned to him by the sponsors to help him with that office.

Officers are usually elected twice a year, so that more people have a chance to participate.

Members of one club may visit other clubs, but it is preferred that they belong to only one club.

Meetings should be held once a month, at a time decided upon by the sponsors and Lookouts together.

Before each meeting, a calling committee should contact all handicapped persons, Lookouts, and sponsors, giving them all the details of the meeting so that they can come prepared.

Programs can be as varied as the members of the club. A good variety of activities would include during the year some speakers, talent shows, craft workshops, field trips, learning programs, dances, picnics, and a great deal of group activity. The handicapped persons and Lookouts should work together to plan their programs, but it is a good idea for sponsors to plant some ideas if the club hits a snag.

A suggested number of members on roll for the club is 15 handicapped persons and 15 Lookouts. Some Lookouts are assigned, as the officers are, but it is suggested that Lookouts and handicapped work together in a group rather than formal pairing.

Sponsors. Sponsors are adult Lookouts who take full responsibility for a TNT Club. The role of the sponsor is to keep everything going when it looks as if it is falling apart. They should make club members feel comfortable; encourage handicapped members to assume some responsibility;

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[4] Much of this material is summarized from the TNT Clubs Handbook (Humphreys, 1971).

keep all handicapped members actively participating and make a point not to leave anyone out; assist the Lookouts with troublesome situations; encourage Lookouts and watch for over-attachment by handicapped members toward Lookouts; be in charge of recruitment of interested and responsible Lookouts; and maintain and actively support the purposes and goals of Outlook Nashville.

Lookouts. Lookouts are non-professional persons, pre-teens through older persons, handicapped or non-handicapped, who have taken the Lookout Training Course. They should attend meetings regularly; be attentive and share with the handicapped members; enter into club activities; and receive direction about the purpose of the TNT Club both for handicapped and non-handicapped members.

Handicapped members. Handicapped club members have a physical, mental, or emotional condition which imposes stress, temporary or permanent, upon the individual and/or his family that might be partially relieved by an understanding, accepting person in the community. They need encouragement to assist each other and encouragement to socialize with each other.

Activities

The activities provided for the club members should be well suited for the age group and satisfy the diverse needs of all the members. They must keep the interest and the attention of all the club members.

Some of the past year's activities are listed below.

1. Holiday
    a. Halloween Party--haunted house, bobbing for apples, and 3-legged race.
    b. Christmas Party--sang carols; Santa and two reindeer came and passed out candy canes and apples; made snowmen out of styrofoam; made a Christmas scrapbook for the Children's ward at the nearby state mental institution.
    c. Valentine's Day--decorated heart shaped cookies with icing and candies; make Valentines; skit/play on Love; search for hidden candy hearts.
    d. Birthday--sang Happy Birthday and had Birthday cake.
    e. Mother's Day--made paper carnations.
2. Outside Programs
    a. Puppets program--filmstrip on puppets' marionette show.
    b. Talk by woman about gardening.
    c. Play by students from one of the local high schools.
    d. Entertainment by group of high school drama students--skits, songs.
    e. Slides of travels to a foreign country.
    f. Musical group performed from a school for the mentally retarded.
    g. Magic show.
3. Different Meeting Places
    a. One club visited another club.
    b. Picnic--scavenger hunt for nature type things; roasted hotdogs.
    c. Trip to Children's Museum.
    d. Hay ride.

4. Games

a. Real names of actors passed out and members had to guess who they were.

b. Checkers and chinese checkers.

c. Recall the first name of each member and that person's favorite hobby.

d. Pass set of keys around in a circle until the music stops and whoever is left holding the keys has to leave the circle.

e. Paper and pencil in groups of two where people make up as many words as possible from the word Thanksgiving.

f. Balloon basket ball game.

g. Twister game.

h. SWAT--pass rolled up newspaper around in circle with one person in middle with eyes shut. When person is hit with the paper, opens eyes, and tries to guess who hit him/her while paper is hidden behind people's backs.

i. Each member had a letter and they had to move around the room and spell words. Teams competed to spell the word the fastest.

j. Pass ball with a built in timer around in a circle until timer goes off, and the person left holding the ball must leave the circle.

k. Shaving others with shaving cream and spoon and when time is called the one with the least cream on the face of the person shaved wins.

l. Ball is thrown at a "King" (person in middle who sits in a chair) while another person is guarding the "King." If the "King" is hit with the ball then all positions are changed.

m. Simon Says.

n. Bingo.

5. Programs by members, Lookouts and sponsors

a. Slide shows of trips, etc.

b. Lookouts bring guitars and everyone sings songs at meeting.

c. Slides of previous meeting which had been held outside.

d. Worship service run by Lookouts.

6. Other

a. Square dancing.

b. String popcorn.

c. Made refreshments--baked cookies.

d. Made paper flowers.

e. Made plaque for a high school who had invited them to a program.

For further discussion about TNT Clubs refer to speech by Lee Humphreys titled "The Working of Outlook Nashville's TNT Club" found in Appendix A.

Recreation Manual

The recreation manual (Sultana, K., 1971) developed out of a desire to compile a recreation program for the handicapped. It was written specifically for use by TNT Club sponsors in their individual club settings. The purpose of the manual was to give the sponsors some direction in choosing appropriate activities for the group.

This manual was written to enable handicapped children to develop the levels of fundamental motor skills necessary for successful participation in games, sports, and recreation activities. The author researched the available information and compiled various activities for three different types of handicaps: mentally retarded, blind, and speech impaired. These are followed by a section on activities for all the handicapped which is applicable to the typical TNT Club as they are composed of many types of handicapped members. The last chapter describes camping and nature activities.

Training and Recruiting Materials

Film production. A request was made in the initial application for funds for a training film. Although SRS personnel expressed the opinion that film production was an expensive method for developing training materials, the desirability of a film suitable both for training and the recruiting of volunteers through public media circulation seemed apparent. Accordingly, a budget was established and a contract signed with the Continuing Education Division of the Regional Medical Program to produce the film, this organization having more experience in the sort of production desired as well as submitting the lowest bid. Mr. Sid O'Berry entered upon an active program of filming Outlook activities beginning with the Parks Program in 1971, and continuing with all relevant program activities through the Parks Program of June-July, 1972. Initial screening of the film indicates that it is excellent. A 25-minute film to fulfill the contract is now being edited, and the script is being written by Mr. Herschel Pollard. Residual footage to the extent of about 90-minutes will remain, and is being studied for suitable special training clips and stills. Four prints of the film will be furnished. It will be available for circulation to agencies outside Nashville upon request, and copies of the script will be available for interested groups as well.

Instrumentation

Measuring Attitudes Toward Disabled Using the Semantic Differential

Scales to measure attitudes toward the disabled are numerous. Search indicated that a few were utilized frequently and had a great deal of research: The Attitudes Toward Disabled Persons (ATDP) Scale (Yuker, Block and Younng, 1970), Jordan's Attitude Behavior Scales (ABS) based on Guttman Facet Theory (Jordan, 1971), and Siller's Disability Factor Scales (Siller, Ferguson, Vann, and Holland, 1967). A thorough search of the literature led us to determine that none of these were suitable for our purposes. These scales are briefly described, and the reasons why they were not suitable are detailed below.

Existing Scales

The ATDP includes 30 items which are rated on a Likert scale. Positive responses are those which indicate that disabled persons are not different from non-disabled persons and should not be treated differently. This is in line with Outlook Nashville's philosophy.

The ATDP was previously used in a study of Outlook's program in 1966. Comparisons between scores before and after the training program did not show significant differences. However, volunteers who dropped out of the training course had scores significantly lower than those who completed the program, although ATDP scores did not predict actual participation of volunteers who completed the training course (Page, 1968). This provides some evidence of validity, but also some indication of problems with the instrument. It is possible that with continuing volunteers, the range of scores is too low for meaningful differentiation.

Jordan (1971) criticizes the ATDP as well as other attitude scales, in that they measure only stereotypic attitudes, which are far removed from behavior. In addition, the scoring, although in the direction of Outlook's philosophy, may be too strong in assuming any view of the handicapped as different is negative.

> "Therefore, the instrument may ironically identify the well-informed who see disabled persons as actually having unique problems and unique needs, as having negative attitudes toward disabled persons....it is suggested that the assumptions underlying the ATDP scale be reconsidered (Palmerton, 1968, 4828)."

Based on these criticisms and the problems with previous data gathered on the ATDP, we decided not to use this scale.

Jordan's scales measure six levels or attitude components. He has individual scales for blind, deaf, and mentally retarded and has not yet developed a scale to deal with the handicapped in general. Each scale requires 45 minutes to an hour. These practical problems seemed insurmountable. Although the method seems quite promising, it didn't seem feasible for current purposes. In addition, the scoring system

Jordan used has some problems.

> "The question essentially was: 'which is the best or most favorable response--to say that the mentally retarded are equal to or superior to other people in some positive manner or, stated differently, which is the best attitude--the more realistic one or the one denoting the most positive evaluation without necessarily being grounded in reality considerations?' It was decided finally to weigh the items on a negative to positive evaluative dimension without concern for which is necessarily the most 'realistic' response since there seemed to be more inherent difficulty defining 'reality' in this regard than in defining 'positive evaluations,' (Jordan, 1970, p. 17)."

The decision to score items based on positive responses rather than realistic responses is questionable. Although defining realistic responses is difficult, it would be possible to get ratings of realism by expert judges and utilize these for scoring. With such a modified scoring method and an abbreviated scale which could measure attitude toward handicapped in general, Jordan's scale would prove useful.

Siller has a number of scales on individual disabilities, as well as a general scale, Opinions About the Disabled. However, the written material describing reliability and validity does not include information on the general scale. Correlations with the ATDP were moderate and positive. Siller suggests that "the ATDP is essentially a rough measure of an affect dimension (Siller, et al., 1967, p. 36)," while his scale is more representative of the attitude domain. Lack of information was the major reason for eliminating this scale from consideration.

Development of the Semantic Differential

A modified semantic differential has been successfully used to measure attitudes toward disabled groups (Blanton and Nunnally, 1964). Such a method eliminates the disadvantage of unidimensionality of the ATDP, while maintaining ease of administration and brevity which multidimensional scales such as Jordan's lack.

A version of the semantic differential was used last year to investigate Outlook Nashville's program. This was modified slightly for present use.

Adjective pairs were chosen with high loadings on the major factors--evaluation, potency, and activity (three adjectives for the first because of its importance and two for each of the others)--as reported by Osgood, Suci and Tannenbaum (1957). In addition, two adjectives representing familiarity or understanding were included (Nunnally, 1961) and three adjectives representing social stimulus value (Greenbaum and Wang, 1965). The latter was included because of previous utility in semantic differential study of the mentally retarded. Thus, each stimulus was rated on twelve adjective pairs representing five dimensions. Each adjective pair was rated on a Likert-type eight point scale, thus forcing respondents to choose and allowing no neutral category. The term "scale" is used in reports to refer to the five dimensions.

Stimuli were descriptive of symptoms or characteristics rather than naming disabilities (e.g., "a person who uses a cane to find his way" rather than "a blind person"). Twelve characteristics representing various disabilities were used. In addition, "benchmark" constructs were included to serve as comparisons ("a habitual criminal," "the type of person with whom I feel uncomfortable," and "most people I know"). The twelve characteristics of disabilities, the three benchmark constructs and the self (I, Me, Myself) are referred to in reports as "concepts." A "category" is a grouping or clustering of concepts into a single type of handicap. There are six categories of disabilities in our revised semantic differential scale, plus the three benchmark constructs and the self, and the makeup of each category is listed in Tables 2 and 3, first for the 1971 version and then for the revised version used the second year.

The order of adjective pairs was randomly determined, and the same order was used for all stimuli ratings. The position of adjectives, so that positive alternatives appeared equally on the left and right, was also randomly determined within this constraint. The order of stimuli was randomized as well. A copy of the final instrument is included in Appendix B.

Data from the Semantic Differential

There are three methods of reporting scores on the semantic differential. The first is a mean scale rating, or the average of position values (1-8) of ratings for the particular factor scale, concept, or category. The second is an average distance from the Self, or the distance between the average position values of ratings for the handicapped person and the ratings for the Self. The third is a generalized distance measure, described by Lynch (1972) as a measure of identification or empathy. It is referred to by Nunnally (1967) as profile similarity. The smaller the generalized distance the greater the profile similarity, or the greater identification or empathy a person may be said to have with a person with a particular type of handicap.

When comparing scores on the 1971 version of the test with scores on the 1972 version, it was necessary to transform the scores on the earlier test. Mean scores on the earlier test were multiplied by 1.14 since the earlier version utilized a 7-point Likert-type scale while the later version used an 8-point scale (8/7 = 1.14). All scores reported in studies of these comparisons are transformed means.

Spatial Paralogic Attitude Inventory (SPAI) As a Measure of Attitude Toward People with Disabilities

Numerous scales have been used to measure attitudes toward the disabled. For research purposes, we needed a scale which was brief, required minimal verbal skills, and minimized social desirability bias. Scales which had been frequently used were considered: (1) The Attitudes Toward Disabled Persons (ATDP) Scale (Yuker, Block, and Younng, 1970), (2) Attitude Behavior Scales (Jordan, 1971), and (3) Disability Factor Scales (Siller, Ferguson, Vann, and Holland, 1967). All failed to meet our criteria as just described. Only the ATDP was short enough for consideration. It has some problems of interpretation in assuming that viewing the handicapped as different is negative

Table 2

Semantic Differential Components - 1971 Version

Concepts and Categories of Disabilities

Category I. Disabilities of Mobility (e.g., Cerebral Palsy)
  1. A Person Whose Head Shakes All the Time
  2. A Person Who Drools Saliva from His Mouth
  3. A Person Who Staggers When He Walks
Category II. Orthopedic Disabilities
  4. A Person Who Wears Braces on His Legs
  5. A Person With Only One Leg or One Arm
  6. A Person in a Wheelchair
Category III. Cosmetic Disabilities
  7. A Person Whose Face is Badly Scarred
  8. A Person Who is Very Fat
Category IV. Sensory Disabilities
  9. A Person Who Uses a Cane to Find His Way
  10. A Person Who Can't Hear
Category V. Disabilities of Speech and Communication
  11. A Person Who Can't Talk Plain
  12. A Person Who Stutters or Stammers
Category VI. Mental Disabilities
  13. A Person Who Often Has Trouble With the Police
  14. A Person Who is Stupid
  15. A Person Who Hears Voices a Lot When Nobody is There
Category VII. The Self
  16. I, Me, Myself

Adjective Pairs

Factor: ACTIVITY

active-passive
fast-slow
dull-sharp

Factor: POTENCY

light-heavy
large-small
strong-weak

Factor: EVALUATION

ugly-beautiful
clean-dirty
awful-nice

Factor: UNDERSTANDABILITY

rare-common
familiar-strange
confusing-understandable

Table 3

Semantic Differential Components - 1972 Version

Concepts and Categories of Disabilities

Category I. Cerebral Palsy
  1. A Person Who Drools Saliva from His Mouth
  2. A Person Who Staggers When He Walks
Category II. Orthopedic Disabilities
  3. A Person Who Wears Braces on His Legs
  4. A Person in a Wheelchair
Category III. Cosmetic Disabilities
  5. A Person Whose Face is Badly Scarred
  6. A Person Who is Very Fat
Category IV. Sensory Disabilities
  7. A Person Who Uses a Cane to Find His Way
  8. A Person Who Can't Hear
Category V. Communication Disabilities
  9. A Person Who Can't Talk Plain
Category VI. Juvenile Offender
  10. A Person Who is Very Slow to Learn
  11. A Person Who Destroys Property
  12. A Person Who Doesn't Obey Authority
Benchmark Constructs
  13. Most People I Know
  14. The Type of Person With Whom I Feel Uncomfortable
  15. A Habitual Criminal
The Self
  16. I, Me. Myself

Adjective Pairs

Factor: ACTIVITY

active-passive
fast-slow

Factor: POTENCY

large-small
strong-weak

Factor: SOCIAL STIMULUS VALUE

neat-sloppy
reliable-unreliable
dependent-self-reliant

Factor: EVALUATION

ugly-beautiful
clean-dirty
awful-nice

Factor: UNDERSTANDABILITY

confusing-understandable
familiar-strange

(Palmerton, 1968), requires verbal skills, and has possible social desirability bias.

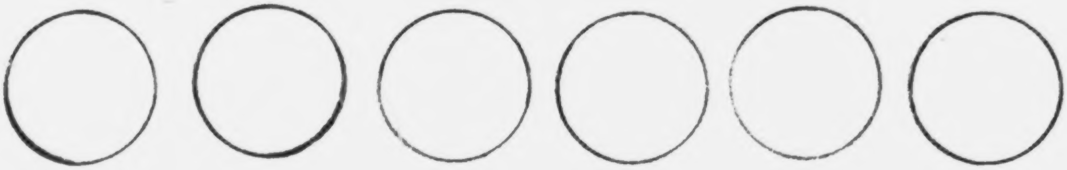
Self-esteem is a relatively enduring attitude toward the self resulting from evaluation of the self as an "object" (Robinson and Shaver, 1969, p. 47). Thus, instruments functional as measures of attitude toward the self should also be useful in measuring attitudes toward others, and in fact, a self-esteem measure was located which met our criteria. Criticizing previous self-esteem research for (1) failure to emphasize the social nature of the self, (2) use of inadequate measurement techniques, and (3) reliance on verbal self-report measures, Ziller, Hagey, Smith, and Long (1969) constructed and validated an instrument to overcome these shortcomings. The task requires that each set of six concepts (e.g., someone who is flunking, the happiest person you know) be assigned to one of six circles placed horizontally. The "self" is included in each set, and the sum across sets of "self"-placements is the esteem measure. The ordering process is based on spatial paralogic--people place elements in a linear order and such ordering proceeds more readily in a rightward direction (DeSoto, London, and Handel, 1965). Left position is associated with high esteem in accordance with the cultural norm and based on empirical evidence (Morgan, 1944; Ziller et al., 1969). Subjects are instructed to assign concepts to circles in any way they like. This measure has been used successfully in a number of studies (Ziller and Grossman, 1967; Ziller, Megas, and DeCencio, 1964).

A variant of the self-esteem instrument, hereafter called the SPAI (Spatial Paralogic Attitude Inventory), was constructed to measure attitudes toward people with disabilities. In each set of six concepts, the self was included along with one person with a stigmatized disability, one person with a non-stigmatized disease, and three persons in occupations of varying status. The sum of placements of people with disabilities forms the SPAI-HC, a measure of attitudes towards people with disabilities. A measure of self-esteem or attitude toward the self (SPAI-Self) is similarly attainable by summing the placements of the self. See Figure 4 for a sample set of concepts. Several studies using the SPAI have been completed to assess the validity of using the SPAI-HC to measure attitudes toward people with disabilities. The instrument is included in Appendix B.

Figure 4

Sample Concepts from the SPAI

Y-Yourself
P-Photographer
C-Carpenter
D- Doctor
M-Mentally Ill Person
U-Person with an Ulcer



Study 1

The first study was designed to test the construct validity of the SPAI-HC using a known groups procedure. It was assumed that people with a disability would place that disability more to the left (i.e., view it more positively) than would the rest of the population.

Method. A form of the SPAI consisting of six sets of concepts (one of which included a person with multiple sclerosis as the stigmatized disability) was mailed to the 50 multiple sclerosis patients living in Madison, Wisconsin whose names were on file with the Central Wisconsin chapter of the National Multiple Sclerosis Society and to a random sample of 160 community members selected from the Madison voter registration records. Respondents were asked to first complete the six-item SPAI as they wished; then they were asked to complete the same instrument as would an average person in the community. The actual subjects consisted of the 15 (30%) multiple sclerosis patients and 29 (18%) community members who returned the questionnaire. The low return rate makes it difficult to generalize from the data, but there is no reason to believe that the returns would be systematically biased in a manner affecting our hypothesis.

Results. Comparisons were made between the mean ratings of the two groups on each stigmatized disability. The means are presented in Table 4. The only significant differences were on the rating of mental illness (t=2.52, df=42, p<.05) where multiple sclerosis patients gave more negative ratings and on the rating of multiple sclerosis (t=2.8, df=42, p<.01) where multiple sclerosis patients gave significantly more positive ratings than the control group.

Table 4

Mean Attitudes Toward People with Stigmatized Disabilities

Responded as Themselves

	Polio	Mental Illness	Deafness	Multiple Sclerosis (MS)	Blindness	Cerebral Palsy
MS Patients	3.26	2.26	2.73	4.47	4.26	3.20
Controls	3.37	3.50	2.75	2.89	3.37	2.82

Analyses comparing the two groups' placements of stigmatized disabilities as they thought an average person would place them showed no significant differences between the groups. These means are presented in Table 5.

Study 2

Further evidence for the construct validity of the SPAI-HC was

Table 5

Mean Attitude Toward People with Stigmatized Disabilities

Responded as they thought an average person would

	Polio	Mental Illness	Deafness	Multiple Sclerosis	Blindness	Cerebral Palsy
MS Patients	2.80	2.66	2.60	3.33	3.33	3.06
Controls	3.00	2.51	2.82	2.64	2.92	2.42

gathered as part of another study using college students who had volunteered to work in a program with disabled individuals.

Method. A battery of tests including another form of the SPAI[5] and the ATDP was administered to two groups of college student volunteers--14 undergraduates majoring in special education at George Peabody College for Teachers and 12 undergraduates majoring in psychology at Vanderbilt University. About five months later, the same test battery was readministered, but retest data are only available from 9 of the college students.

Results. Low positive correlations were obtained in all instances between the SPAI-HC and the ATDP. These correlations are presented in Table 6. Only two out of the four correlations were statistically significant due primarily to small sample size.

Table 6

Correlations between ATDP and the SPAI-HC

Groups	Correlations	Cell Size
Vanderbilt Students	.35	12
Peabody Students	.56*	14
College Students Combined	.42*	26
College Students Post-tests	.42	9

*$p < .05$

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[5] The six concepts in each item differed from the form used in Study 1, but the general form used was the same.

Study 3

The relation of the SPAI-HC to other variables generally relevant to attitudes toward people with disabilities was assessed as additional evidence of construct validity.

Yuker et al. (1970, p. 48) found that in the majority of studies with nondisabled subjects, females reported significantly higher (more accepting) scores than males on the ATDP, and no significant differences in the reverse direction were found. In addition, they summarized studies using other instruments--five studies indicated that females were more accepting of people with disabilities, but two studies showed males were more positive. Several reasons for the discrepant results were suggested, and the general conclusion drawn was that females have more positive attitudes.

It was expected that those volunteering to work with people with disabilities would express more positive attitudes than a general population would. Also, reviews of a number of studies indicate that, "In general, increased contact with disabled persons is related to more positive attitudes (Yuker et al., 1970, p. 93)."

The relation of SPAI-HC ratings to sex, contact with the disabled, and volunteering was investigated as part of several studies conducted primarily for other purposes.

Method. A battery of tests including the SPAI and relevant background information was administered to groups volunteering to work with the disabled. Complete data were obtained from: 13 junior and senior high school students (called Calvary Lookouts) and 9 adults who volunteered to work through a program at Calvary Methodist Church, 15 Peabody undergraduates, and 12 Vanderbilt undergraduates (grouped together as combined college for some analyses). In addition, 137 participants in Junior Achievement were tested. Four to six months later, retests were obtained from 9 college students, 10 junior and senior high school students, and 72 junior achievers.

Results. Means on pre-tests and post-tests for males and females within each group are presented in Table 7. In six of the seven comparisons, females' scores show more positive attitudes toward people with disabilities. In most of the cases, however, the differences between males and females are not statistically significant. When all subjects are averaged together, females have higher scores than males on both pre and post-tests, but only on post-tests are the differences significant ($t=3.00$, $df=90$, $p<.01$).

Only pre-tests are useful for comparing inexperienced and experienced individuals, since most of the people tested gained experience with people with disabilities in the interim prior to the post-tests. The means for inexperienced and experienced individuals within each group are presented in Table 8. Three of the four comparisons show differences between the groups in the predicted direction, but none of the differences are statistically significant. However, when all subjects are combined, experienced subjects have significantly higher scores ($t=2.32$, $df=184$, $p<.05$) than do inexperienced subjects.

Table 7

Comparisons Between Males and Females on Mean SPAI-HC

	Pre-tests					Post-tests				
Groups	Males	Females	t	df	p<	Males	Females	t	df	p<
Calvary Lookouts	21.67	31.57	2.03	11	.10	28.75	19.83	0.13	10	n.s.
Combined College	23.78	27.83	1.31	25	n.s.	16.00	21.57	0.78	7	n.s.
Calvary Adults	21.25	24.60	0.89	7	n.s.					
Junior Achievers	18.85	19.28	0.22	135	n.s	13.70	23.00	3.62	70	.01
All Subjects	19.92	21.50	0.96	184	n.s.	15.67	22.54	3.00	90	.01

Table 8

Comparisons Between Pre-tests on SPAI-HC of People

With and Without Experience with Individuals with Disabilities

Groups	Inexperienced	Experienced	t	df	$p <$
College Students	23.36	28.63	1.82	25	.10
Calvary Lookouts	32.20	23.75	-1.60	11	n.s.
Calvary Adults	21.67	26.00	1.12	7	n.s.
Junior Achievers	18.57	20.82	1.04	135	n.s.
All Subjects	19.69	23.51	2.32	184	.05

All individuals except those in Junior Achievement were volunteers. To compare their scores on the SPAI and provide another test of the experience hypothesis, a least squares analysis for unequal n with factors--groups (Peabody, Vanderbilt, Calvary[6], and Junior Achievers) X experience--was run using pre-test scores on the SPAI-HC as the dependent variable. The results are presented in Table 9. There was a significant main effect for groups ($F=3.24$, $df=3,18$, $p<.05$). The means corresponding to this effect are presented in Table 10. The Junior Achievers were significantly more negative in attitude than Peabody students (the most positive group). Thus, there is some indication that volunteers have more positive attitudes than the typical population. However, there is no indication from this data that experienced individuals have more positive attitudes.

Data on junior achievers were analyzed separately to provide further evidence on the effects of contact. More complete information on this study is presented in a later section of this report. The 43 junior achievers who took both pre and post-tests were divided into those who had a disabled person in the Junior Achievement company and those who didn't; further division of the group was based on whether or not company advisors had been given an orientation course. An analysis of variance on SPAI-HC scores showed a significant main effect for trials ($F=4.71$, $df=1,39$, $p<.05$) and a trend toward an interaction of all three

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[6] For this analysis the adults were combined with the junior and senior high school students because of their common volunteer experience and called Calvary.

Table 9

Analysis of Variance

Groups X Experience on SPAI-HC

Source	df	MS	F
Groups (G)	3	342.32	3.24*
Experience (E)	1	79.74	1.00
G X E	3	143.63	1.36
Error	182	105.66	

*$p<.05$

Table 10

Mean SPAI-HC Scores for Groups

Groups	Mean
Peabody	28.43a
Vanderbilt	23.25ab
Calvary	23.32ab
Junior Achievers	19.39b

Note.--Means with a subscript in common do not differ significantly from each other $p<.05$ using the Duncan multiple range test.

variables--whether there was a disabled achiever in the company, whether the advisor had been given a course, and trials--($F=3.98$, $df=1,39$, $p<.10$). Achievers showed less positive attitudes on post-testing ($\bar{X}=16.99$) than on pre-testing ($\bar{X}=20.43$). This occurred for all groups except when no disabled were in the company and the advisor had been given a course. The relevant means are presented in Table 11. Thus, contrary to expectation, experience with the disabled resulted in more negative attitudes for these subjects.

Discussion

In study 1 it was shown that people with a disability (multiple sclerosis) rated that disability more positively than other people did, while these groups rarely differed on other ratings.

Table 11

Mean SPAI-HC Scores for Junior Achievers Retested

	No Disabled in Company		Disabled in Company	
-	Advisor No Course	Advisor Course	Adviser No Course	Advisor Course
Pre-test	21.43cd	18.77bc	23.11d	18.4bc
Post-test	16.86b	21.15cd	20.17bc	9.8a
Cell Size	N=7	N=13	N=18	N=5

Note.--Means with a subscript in common do not differ significantly $p < .10$ ($LSD_5=5.29$, $LSD_{5,7}=5.04$, $LSD_7=4.45$, $LSD_{5,13}=4.45$, $LSD_{5,18}=4.24$, $LSD_{7,13}=3.95$, $LSD_{7,18}=3.78$, $LSD_{13}=3.28$, $LSD_{13,18}=3.02$, $LSD_{18}=2.77$).

Study 2 showed the SPAI-HC to have a low positive correlation, as expected, with another measure of attitudes toward people with disabilities, the ATDP. Thus, there is some overlap in the construct measured by these two instruments. The lack of a higher correlation may be because the SPAI eliminates some of the problems associated with the ATDP as discussed earlier.

Study 3 lends some additional validity evidence, but the findings are less clearcut. In nearly all instances, females rated the disabled more positively than males did, which parallels previous research on sex differences. The lack of significant differences in most comparisons, however, suggests a problem in the high variability of the SPAI-HC score.

This same problem occurred in looking at differences between people with and without experience with the disabled. In most of the groups, the experienced people expressed more positive attitudes, but due to high variability, only when all subjects were combined were the differences statistically significant. In addition, on the analysis of variance computed for groups X experience, there was no indication that experience had an effect either alone (as a main effect) or for some of the groups (in interaction with groups).

This analysis did, however, provide evidence that volunteers express more positive attitudes on the SPAI-HC than do nonvolunteers. The nonvolunteers (junior achievers) expressed less positive attitudes than any of the volunteer groups, although the difference was only significant when comparing the most positive volunteer group.

Finally, study 3 showed more negative attitudes expressed by achievers on the SPAI-HC on post than on pre-testing. It is not clear whether this suggests invalidity of the measure or whether it is evidence of a finding contrary to prediction. It may be that experience leads to a more realistic view of people with disabilities, which shows up as a more negative attitude on tests. It is also possible that voluntary and nonvoluntary contact result in different effects, with more positive attitudes following voluntary contact. This could explain the positive findings for experienced versus inexperienced individuals and the reverse finding of more negative attitudes among junior achievers who had no say in whether a disabled achiever was in their company.

In summary, evidence has been presented suggesting construct validity for the SPAI-HC. No direct evidence was presented on the social desirability issue. The SPAI seems to be a less obtrusive measure than the typical self-report attitude inventory; however, empirical evidence is necessary to show this. These preliminary results suggest it as a useful instrument which is brief and requires minimal verbal skills from those tested.

Validity evidence was not presented for the SPAI-Self score, since it is quite similar to the self-esteem measure constructed by Ziller et al. (1969) which has been repeatedly validated. There is no reason to believe that changing the constructs to be placed in circles would make the self-esteem measure less valid; clearly, the actual scores obtained with different constructs might not be comparable. Thus, both the SPAI-HC and SPAI-Self seem to be viable measures. When both are computed from the same testing, the fact that they are not independent must be taken into consideration in utilizing the data. In addition, the ease of modifying Ziller's self-esteem measure to construct a measure of attitudes toward people with disabilities, the SPAI-HC, suggests that it might also be used to measure other attitudes with some modifications.

Self-Esteem and Locus of Control Measures

Personality of volunteers before and after experience was investigated in several studies during the two project years. Self-esteem was the major variable considered, but locus of control was also measured. Three different self-esteem measures and one locus of control scale have been utilized.

Self Concept Scales

Tennessee Self Concept Scale (TSCS). In early work, this scale (Fitts, 1965) was utilized. Since a great deal of material has been published describing research utilizing this scale (cf. Fitts, 1972b; Fitts, 1972c; Thompson, 1972), it will be described briefly here.

The TSCS consists of 100 self-descriptive statements to which the subject responds on a 5-point scale ranging from "Completely true" to "Completely false." There are 29 possible scores which comprise a TSCS profile. Ten of the items came from the MMPI L-Scale and comprise a measure of defensiveness, the self criticism score. The remaining 90 items comprise a two-dimensional schema with three internal referents (identity, self satisfaction, and behavior) on one dimension orthogonal to five external referents (physical self, moral-ethical self, personal self, family self, and social self) representing the other dimension. Frequently, only the overall self-esteem score or Positive (P) score, which is the sum of the 90 items, is reported. The clinical and research form provides six empirically derived scales which we have utilized. These scales differentiated "deviant" groups identified by other criteria--(1) Defensive Positive Scale, (2) General Maladjustment Scale-differentiates between psychiatric patients and non-patients, (3) Psychoses Scale-differentiates psychotic patients from others, (4) Personality Disorder Scale, (5) Neurosis Scale-distinguishes neurotic patients from others and (6) Personality Integration Scale. The Number of Deviant Signs is an empirically derived measure which is an index of psychological disturbance. Two new scales--number of Integrative Signs and Self-Actualization--indicate strengths and measure overall functioning (Fitts, 1972a).

Rosenberg self-esteem scale. The length of the TSCS made us search for another self concept scale for later research. The Rosenberg (1965) self-esteem scale was one measure found valuable. This ten item Likert type scale was constructed for use in measuring high school students' attitudes toward themselves. Items are clustered for scoring purposes to yield a seven point scale. Scoring individual items is also possible. Administration of the Rosenberg to three groups produced high correlations between the two measures in each group (.94, .83, and .78); only the clustered scoring method is reported, since it is the more common measure.

Like Name. An even shorter measure of self-esteem was located. Boshier (1968) reports correlations of .767 for girls and .811 for boys (school age subjects with mean age of 12) between the Coopersmith self-esteem inventory and responses to "Do you like your first name?" scored as 1 or 0. This measure was also used with some groups, although we asked for responses to this question from strongly dislike to strongly like, scored from -3 to +3.

Bialer-Cromwell Locus of Control Scale

This scale was adapted by Bialer (1961), for use with children, from a self-report questionnaire designed for young adults. The scale consists of 23 items answered yes or no, and the score is the number of responses in the direction of internal control.

Relationship Between Measures

The Rosenberg and "Like Name" were positively correlated ($r=.44$, $N=11$) for junior and senior high students. The correlation, due to small N, is not statistically significant. There was no correlation between them for an adult group ($r=.05$, $N=12$). The younger group was retested approximately four months later and the positive correlation ($r=.44$, $N=10$) remained. A larger group of high school students took the Rosenberg and "Like Name," and scores on the two tests were significantly positively correlated ($r=.24$, $df=154$, $p<.01$) for them, as well. These correlations provide additional validation for the "Like Name" as a self-esteem measure for children, but the lack of correlation for adults suggests that it may not be valid for them. Boshier (1968) suggested that "the importance assigned to one's name declines with the end of school (p. 762)," and only claimed validity for the measure for the age group tested.

Previous research has shown internal locus of control to be positively related to self-esteem (Rosen, 1970). This finding was replicated using "Like Name" and the Bialer scale for Junior Achievers ($r=.19$, $df=139$, $p<.05$) and the other high school group ($r=.16$, $df=154$, $p<.05$). However, when Junior Achievers were retested several months later, the two measures were no longer correlated ($r=.01$, $df=42$, n.s. for those pretested; $r=-.16$, $df=28$, n.s. for those not pretested). The Rosenberg was also positively correlated with Locus of Control for high school students ($r=.24$, $df=154$, $p<.01$). These replications lend some weight to the validity of the scales utilized. However, the relationship between self-esteem and locus of control is not clear, as indicated by the different results with Junior Achievers on the second testing.

Attitudes toward the Disabled

Summer Parks Program Lookouts

Lookouts (LOs) participating in a summer parks program sponsored jointly by Outlook Nashville, the Metro-Nashville Parks Department, and the American Red Cross during the summer of 1971, were given a semantic differential scale to measure attitudes toward themselves and the handicapped, and the Tennessee Self Concept Scale (TSCS). Tests were administered during an orientation course and again at the end of the program--an interval of about two months.

The 26 LOs for whom pre and post-tests exist consisted of a group of six individuals from correctional schools (Tennessee Vocational School for girls and Spencer Youth Center for boys) and 20 other volunteers.

The Tennessee Self Concept Scale

Results. Comparisons between pre and post-tests scores were made for each of these groups separately on what seemed to be the most relevant scales of the TSCS. In addition, the two groups were compared to each other on pretests and on post-tests. All comparisons were made using t-tests and two-tailed probabilities are presented.[7]

Mean scores for the scales analyzed are presented in Table 12 and the other means are presented in Table 13.

On the seven scales analyzed there were no significant differences between pre and post-tests for either group. There was a trend for volunteers to show less general maladjustment ($t=1.85$, $df=19$, $p<.1$) and more personality integration ($t=1.88$, $p<.1$) on post-tests. The general maladjustment scale differentiates psychiatric patients from non-patients. The personality integration scale differentiates people judged as well-adjusted and highly integrated from others.

When the correctional school students were compared to the other volunteers, a number of differences were found. Most of these differences replicated on post-tests as well as pretests.

The following differences held on pre and post-tests. Correctional school students had significantly higher total conflict scores ($t=4.15$, $p<.001$; $t=5.25$, $p<.001$)[8] indicating that they show confusion, contradiction, and general conflict in self perception. Correctional school students also had significantly lower personality integration scores ($t=2.56$, $p<.01$; $t=3.08$, $p<.01$), and a higher number of deviant signs ($t=3.76$, $p<.001$; $t=4.97$, $p<.001$) indicating more deviant features throughout their responses.

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[7] All comparisons in this report use two-tailed probabilities.

[8] The first t presented represents the pretest comparison and the second t, the post-test comparison. All of these comparisons had 24df.

Table 12

Mean Scale Scores

Tennessee Self Concept Scale

	Vocational School		Other Lookouts	
	Pretest	Post-test	Pretest	Post-test
SC-Self Criticism	30.0	29.7	35.4	33.8
Net C-Net Conflict	19.8	14.8	0.5	-0.3
Tot C-Total Conflict	54.2	54.8	34.5	31.6
Total-Total Positive	348.2	344.2	338.3	345.4
GM-General Maladjustment	97.0	98.3	91.0	94.3
PI-Personal Integration	3.8	4.2	9.5	10.7
NDS-Number of Deviant Signs	45.5	56.3	15.4	13.8

Table 13

Mean Scale Scores

Tennessee Self Concept Scale

	Vocational School		Other Lookouts	
	Pretest	Post-test	Pretest	Post-test
T/F-True-False Ratio	1.60	1.46	1.12	1.10
Row 1-Identity	126.5	130.8	123.6	126.3
Row 2-Self Satisfaction	106.3	95.3	106.2	109.3
Row 3-Behavior	115.3	116.3	108.1	109.8
Col A-Physical Self	72.8	74.3	63.5	70.0
Col B-Moral-Ethical Self	70.2	65.2	69.2	71.0
Col C-Personal Self	68.0	68.8	63.8	65.6
Col D-Family Self	68.0	65.2	69.4	69.6
Col E-Social Self	69.2	70.7	67.4	69.1
V Tot-Variability	53.2	71.8	53.2	47.1
V Col-Variations in Columns	32.7	46.5	31.2	28.2
V Row-Variations in Rows	20.5	25.3	22.0	18.9
Dist D-Distribution Score	143.2	150.2	118.8	116.6
5	35.3	37.5	19.7	18.2
4	10.8	7.3	23.0	23.6
3	19.5	36.2	21.1	21.2
2	7.0	3.5	16.0	17.4
1	27.3	32.2	20.2	19.6
DP-Defensive Positive	69.5	64.8	53.0	57.5
Psy-Psychosis	61.3	54.7	46.9	49.4
PD-Personality Disorder	70.2	66.5	73.6	74.4
N-Neurosis	88.5	87.0	82.5	82.4

On the pretest, but not on the post-test, correctional school students had significantly higher scores ($t=2.14$, $p<.05$) indicating that their responses to positive items differ from, or conflict with their responses to negative items in the same area of self perception.

It is interesting to note that the groups did not differ significantly in self-criticism, total positive overall self-esteem, or general maladjustment, on pre or post-tests.

Discussion. Essentially, we can conclude that participation in the parks program did not have much effect on the self concepts of the Lookouts involved as measured by The Tennessee Self Concept Scale. The volunteers from the correctional schools differed from the other volunteers on both pre and post-tests. It was expected that the volunteer experience would positively affect the self concept of correctional school students. The small number involved (six) may be a factor in not showing the expected change. It is also possible that this instrument is not tapping the appropriate aspects.

The students from the correctional schools had scores typical of comparable populations, as seen by comparing their profiles to those reported by Fitts and Hamner (1969, p. 7). Thus, we were working with a representative population. Additional data on an increased number of participants with other instruments is necessary to adequately test the effect of the program.

Semantic Differential

Subjects. Of the 56 persons participating as Lookouts in the Parks Program, 11 were from Spencer Youth Center (for delinquent boys), 8 were from Tennessee Vocational School (for delinquent girls), and 37 were Lookouts from public and private junior and senior high schools. For a number of reasons, test data were not gathered at both testings for all participants. Of the 11 Spencer boys, none were present for pretesting (they entered the program later than others), 8 were present for post-testing only, and 3 left the program early and took no tests. Of the 8 TVS girls, 2 were pre-tested (at a session several months earlier) and took post-tests, one was present for post-testing only, and 5 took no tests. None of these were included in the present report. Of the 37 other participants, 4 took no tests, 10 took post-tests only, 7 took pre-tests only, and 16 were present for both testings. Subjects who took a test which was incomplete or invalid were counted as not having been tested.

The 16 participants in this report were junior and senior high school students, 15 female and 1 male, ranging in age from 11 to 15 years. The TVS girls attended the program 5 days per week, the Spencer boys attended 2 days per week, 12 of the others attended 2 days per week, and 4 attended only 1 day per week.

Results. The tests were scored to yield for each subject mean scale ratings for each concept (handicapping condition) and for each category of disability by each of the four scale factors. In addition, distance from the self was determined for each concept and category of disability by each of the four factors, and an overall distance score was obtained.

After individual scores were obtained, the data were then submitted to a General Balanced Design Analysis of Variance, yielding mean scale ratings for concepts, scales (factors), and concepts X scales, and mean distances from self for concepts, scales, and concepts X scales. The results of these anlayses are presented in Tables 14-21. Data were analyzed separately for pre and post-test scoes.

Mean scale ratings and distances form self for both pre- and post-tests were then submitted to a General Balanced Design Analysis of Variance program, using trials (pre vs. post-tests) X categories X scales for a 2 X 4 X 7 design on mean scale ratings, and a 2 X 4 X 6 design on distance from self. The results of the ANOVA are shown in Tables 22 and 23. Means for trials, scales, and categories on both mean scale ratings and distances from self are listed in Tables 24 and 25.

Significant F-ratios were obtained for the main effects of scales and categories and for the scales X categories interaction on both mean scale ratings and distances from self. In order to establish which pairs of means differed significantly, Newman-Keuls tests were performed on pairs of scale means and on pairs of category means (Table 26) and on pairs of means for categories X scales (Keuls, 1952; Newman, 1939; Kirk, 1968). Significantly different pairs were found in the categories X scales interactions on both mean scale ratings and distance from self, but none were found for categories or for scales on either measure. Since the majority of pairs of means for categories X scales were significantly different from at least one other mean, both for mean scale ratings and distance from self, it is more helpful to present these results graphically than in tabular form. Figures 5 and 6 show the relationships between mean scale ratings, respectively, for significant at p=.05 and p=.01 levels. Figures 7 and 8 show the relationships between means on distance from self. Brackets in these figures connect two means whose difference is the minimum necessary for significance at that level. Obviously, those means with even greater differences are also significantly different.

Discussion. The primary difference which we were hoping to observe was a difference between pre-test and post-test means. A significant difference would have indicated that something that went on with the subjects in their interaction over the summer with the handicapped young people made some changein their (the Lookouts') attitudes toward themselves or toward handicapped people. (Table 27 shows the pre vs. post-test means for scales and categories.)

There are several possible explanations for the failure to find the desired differences in pre- and post-test scores. First, the subjects involved are a self-screened and select sample. Because they are volunteers for the program, it might be expected that they would have attitudes toward the handicapped that are already more positive than those of the general public and would change their attitudes less after experience of this nature. This, unfortunately, is a hypothesis which we cannot support with data, since this particular measure has not been standardized on the general public. It might also be expected that these volunteers have a more positive feeling about themselves which enabled

Table 14

Analysis of Variance Table

Mean Scale Rating for Each Concept - Pretests

Source	df	MS	F	$p<$
Concepts (A)	15	15.334	12.040	0.001
W/N Error	330	1.274		
Scales (B)	3	18.432	7.499	0.001
W/N Error	66	2.458		
AXB	45	6.691	11.424	0.001
W/N Error	990	.586		

Table 15

Analysis of Variance Table

Mean Scale Rating for Each Category of Disability - Pretests

Source	df	MS	F	$p<$
Category (A)	6	16.688	20.221	0.001
W/N Error	132	.825		
Scales (B)	3	7.768	6.740	0.001
W/N Error	66	1.153		
AXB	18	4.035	12.186	0.001
W/N Error	396	.331		

Table 16

Analysis of Variance Table

Distance From Self by Category and Scale - Pretests

Source	df	MS	F	p<
Category (A)	5	8.002	11.091	0.001
W/N Error	110	.722		
Scales (B)	3	65.846	16.887	0.001
W/N Error	66	3.899		
AXB	15	2.959	10.417	0.001
W/N Error	330	.284		

Table 17

Analysis of Variance Table

Overall Distance for Each Concept - Pretests

Source	df	MS	F	p<
Concepts (A)	14	3.032	3.559	0.001
W/N Error	308	.852		

Table 18

Analysis of Variance Table

Mean Scale Rating for Each Concept - Post-tests

Source	df	MS	F	p <
Concepts (A)	15	10.490	11.130	0.001
W/N Error	360	.942		
Scales (B)	3	13.811	6.378	0.001
W/N Error	72	2.165		
AXB	45	7.551	13.263	0.001
W/N Error	1080	.569		

Table 19

Analysis of Variance Table

Mean Scale Rating for Each Category of Disability - Post-tests

Source	df	MS	F	p <
Category (A)	6	13.259	18.171	0.001
W/N Error	144	.730		
Scales (B)	3	6.576	7.243	0.001
W/N Error	72	.908		
AXB	18	3.801	10.082	0.001
W/N Error	432	.377		

Table 20

Analysis of Variance Table

Distance From Self by Category and Scale - Post-tests

Source	df	MS	F	p<
Category (A)	5	2.215	5.078	0.001
W/N Error	120	.436		
Scales (B)	3	39.576	5.997	0.001
W/N Error	72	6.599		
AXB	15	3.382	12.848	0.001
W/N Error	360	.263		

Table 21

Analysis of Variance Table

Overall Distance for Each Concept - Post-tests

Source	df	MS	F	p<
Concepts (A)	14	1.599	2.029	.05
W/N Error	336	.788		

Table 22

Analysis of Variance Table

Trials X Categories X Scales - Mean Scale Ratings

Source	df	MS	F	p<
Trials (A)	1	.220		
W/N Error	15	2.510		
Category (B)	6	16.424	12.275	0.001
W/N Error	90	1.338		
Scales (C)	3	12.531	6.768	0.001
W/N Error	45	1.851		
AXB	6	.697	1.651	n.s.
W/N Error	90	.422		
AXC	3	.134	< 1	
W/N Error	45	.532		
BXC	18	4.173	12.407	0.001
W/N Error	270	.336		
AXBXC	18	.319	1.363	n.s.
W/N Error	270	.234		

Table 23

Analysis of Variance Table

Trials X Categories X Scales - Distance From Self

Source	df	MS	F	p<
Trials (A)	1	2.201	1	n.s.
W/N Error	15	3.838		
Category (B)	5	7.071	7.739	0.001
W/N Error	75	.914		
Scales (C)	3	53.323	10.557	0.001
W/N Error	45	5.051		
AXB	5	.763	1.925	n.s.
W/N Error	75	.396		
AXC	3	5.105	1.830	n.s.
W/N Error	45	2.790		
BXC	15	3.463	13.292	0.001
W/N Error	225	.261		
AXBXC	15	.253	1.249	n.s.
W/N Error	225	.203		

Table 24

Mean Scale Ratings

TRIALS (collapsed across categories and scales)

Pre-test mean	Post-test mean
4.272	4.251

SCALES (collapsed across categories and trials)

Activity	Evaluation	Potency	Understandability
4.116	4.600	4.088	4.241

CATEGORIES (collapses across trials and scales)

Disorders of Mobility	Orthopedic Disabilities
3.817	4.345
Cosmetic Disabilities	**Sensory Disabilities**
4.473	4.185
Communication Disabilities	**Mental Handicaps**
4.055	4.045

The Self
4.911

Table 25

Distance From Self

TRIALS (collapsed across categories and scales)

Pre-test mean	Post-test mean
-0.809	-0.704

SCALES (collapsed across trials and categories)

Activity	Evaluation	Potency	Understandability
-1.399	-0.910	-0.161	-0.556

CATEGORIES (collapsed across trials and scales)

Disorders of Mobility	Orthopedic Disabilities
-1.091	-0.563
Cosmetic Disabilities	Sensory Disabilities
-0.438	-0.728
Communication Disabilities	Mental Handicaps
-0.859	-0.859

Table 26

Newman-Keuls Tests

Mean Scale Ratings: Categories

Largest mean = 4.911; smallest mean = 3.817; difference = 1.094
Number of means = 7
W_r necessary for significance = 1.227 Non-significant

Mean Scale Ratings: Scales

Largest mean = 4.600; smallest mean = 4.088; difference = 0.512
Number of means = 4
W_r necessary for significance = 1.272 Non-significant

Distance From Self: Categories

Largest mean = -1.091; smallest mean = -0.438; difference = 0.653
Number of means = 6
W_r necessary for significance = 0.987 Non-significant

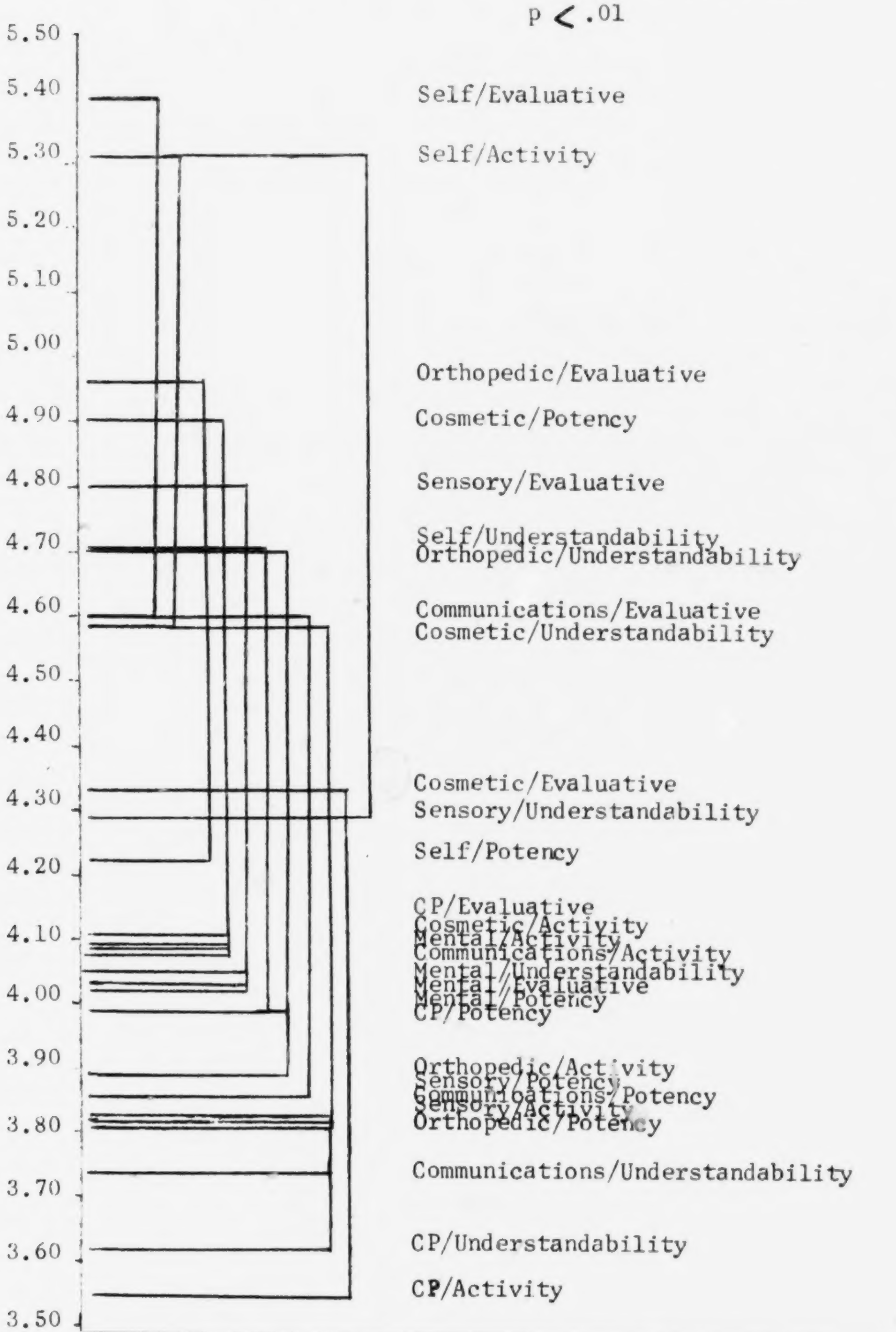
Distance From Self: Scales

Largest mean = -1.399; smallest mean = -0.161; difference = 1.238
Number of means = 4
W_r necessary for significance = 2.101 Non-significant

Figure 5

Mean Scale Ratings: Category X Scale

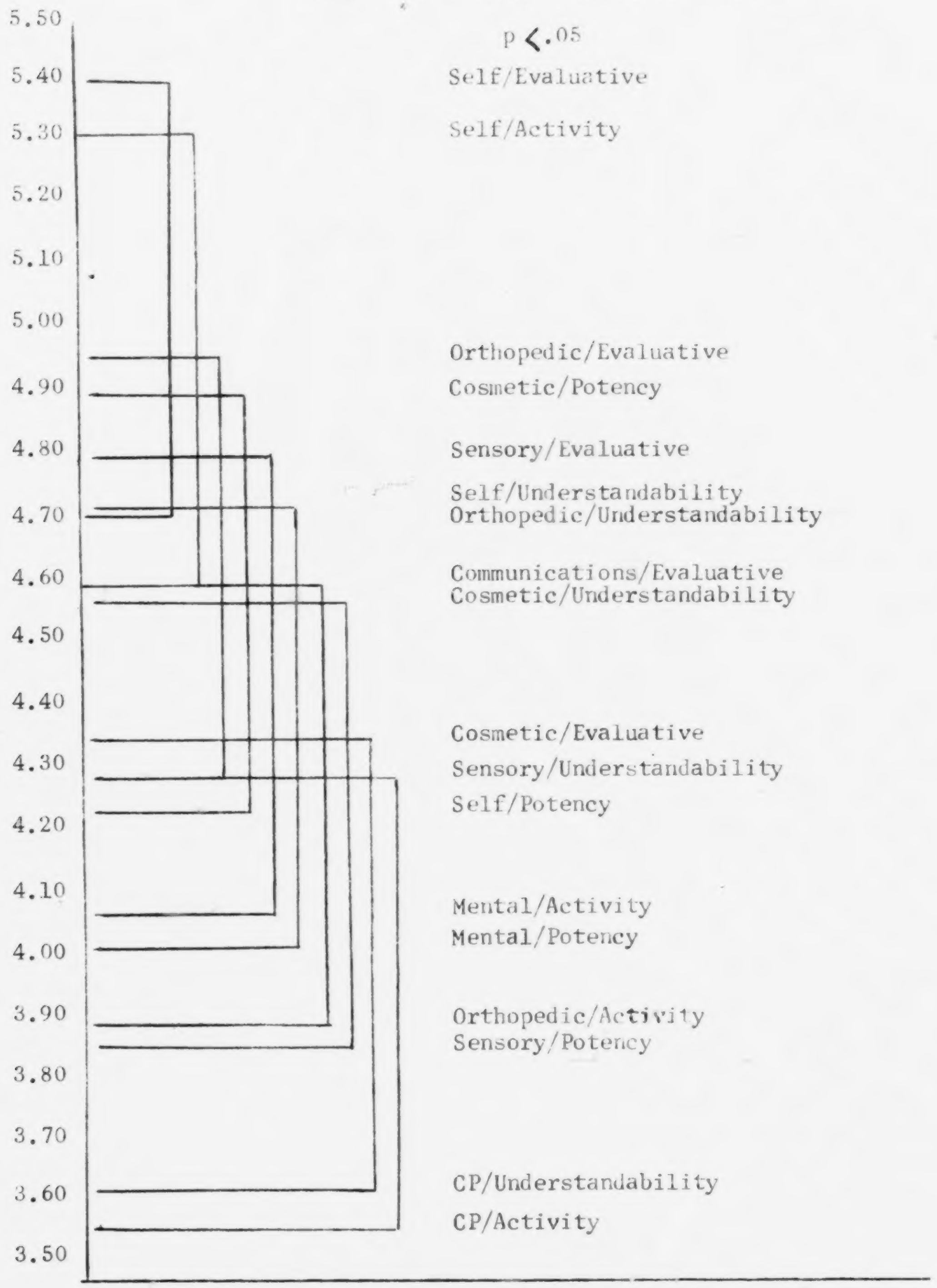
$p < .01$



Brackets connect two means which have the minimum difference necessary for significance at .01 level on the Newman-Keuls Test.

Figure 6

Mean Scale Ratings: Category X Scale

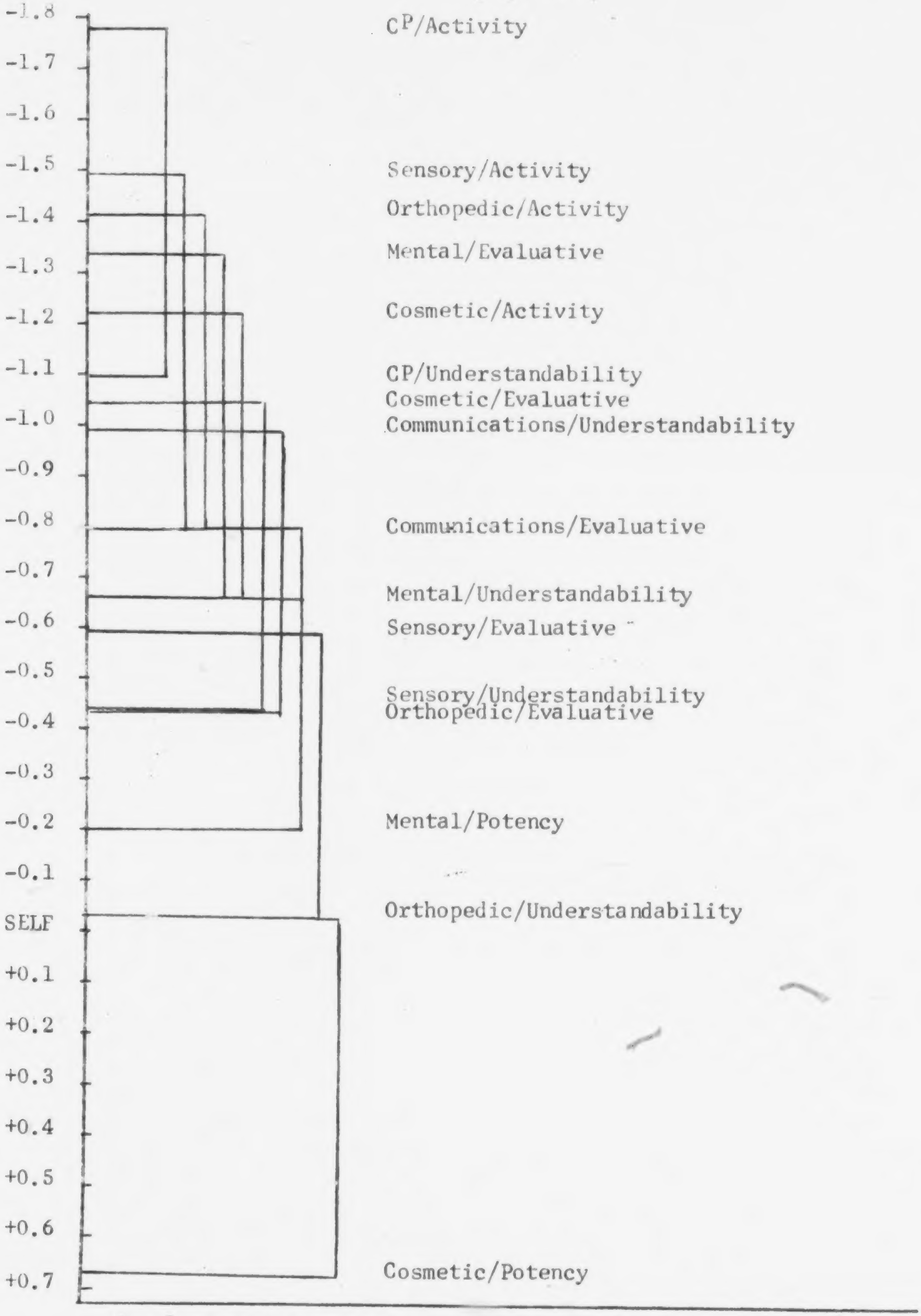


Brackets connect two means which have the minimum difference necessary for significance at .05 level on the Newman-Keuls Test.

Figure 7

Distance From Self: Category X Scale

$p < .01$

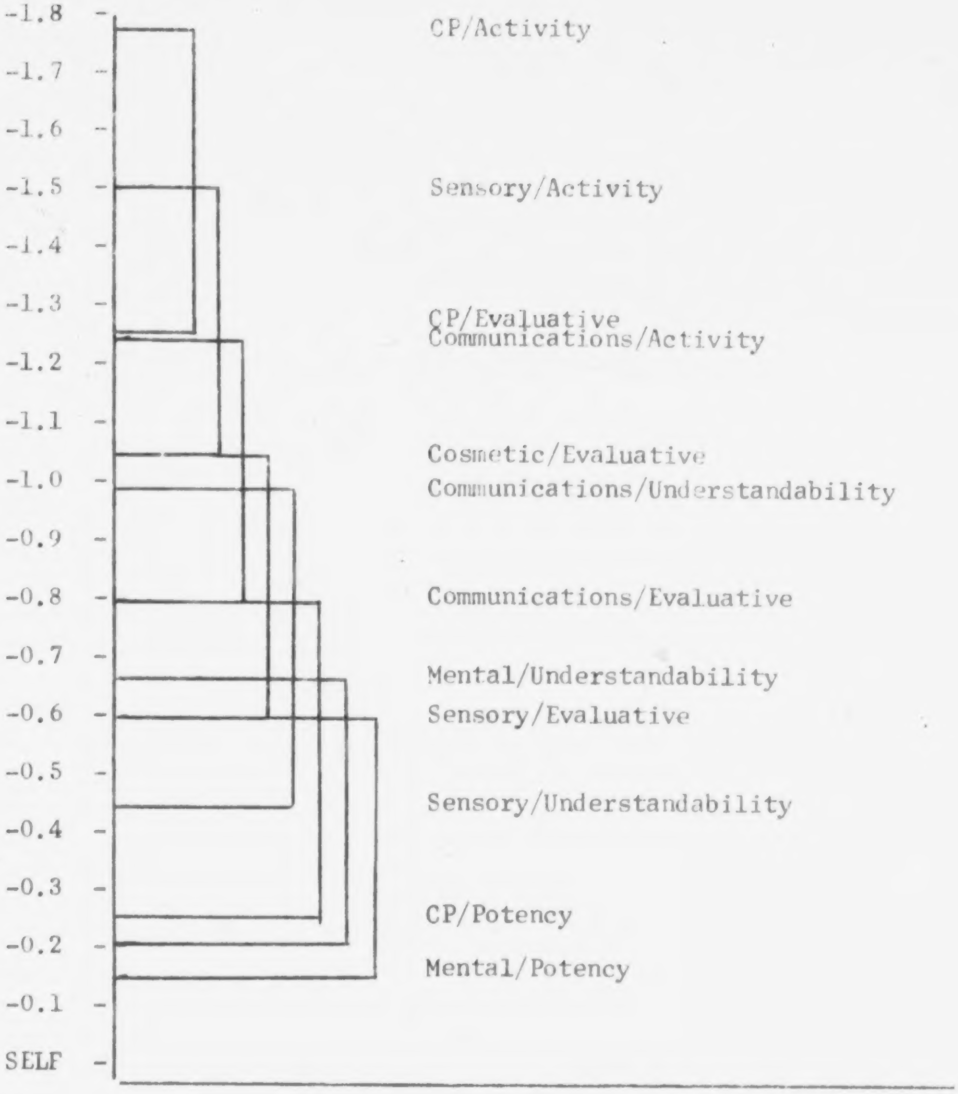


Brackets connect two means which have the minimum difference necessary for significance at .01 level on the Newman-Keuls Test.

Figure 8

Distance From Self: Category X Scale

$p < .05$



Brackets connect two means which have the minimum difference necessary for significance at .05 level on the Newman-Keuls Test.

Table 27

Pre vs. Post-test means by Scale and Category

Category	Mean Scale Rating Pre	Mean Scale Rating Post	Distance from Self Pre	Distance from Self Post
Mobility	3.706	3.928	-1.258	-0.925
Orthopedic	4.380	4.309	-0.588	-0.538
Cosmetic	4.519	4.428	-0.448	-0.427
Sensory	4.298	4.072	-0.672	-0.784
Communication	4.050	4.059	-0.917	-0.800
Mental	3.989	4.100	-0.969	-0.750
Self	4.964	4.858		
Scale				
Activity	4.150	4.082	-1.630	-1.168
Evaluation	4.628	4.573	-1.025	-0.795
Potency	4.092	4.085	-0.177	-0.144
Understandability	4.220	4.262	-0.402	-0.709

them to give of themselves in such a service activity, and would thus have less room for change in their self concepts. The mean scale ratings for self on this measure were 4.964 for the Pre-test and 4.858 on the Post-test--nearly identical scores.

Third, the time involved in this volunteer experience may have been insufficient to bring about any changes in self concept or attitudes toward handicapped persons. Twelve Lookouts participated in the program two days per week, and four participated only one day per week for two months.

Another explanation for the failure to obtain expected or hoped-for changes in Lookouts' attitudes is that the measure we used may not have been adequate to tap the appropriate attitudes involved in the expected process of change.

It is also possible that our number was too small, and that a larger sample might have shown some greater differences. The difficulties we had in testing the participants may also have biased our results, in that those who failed to stay long enough at the orientation sessions for testing, or those who failed to stay with the program throughout the full period of the program, may be in some critical way different from those we tested.

Although no significant differences were found between means on the mean scale ratings, it is interesting to note the trend observed. The order of rating for means by categories, from highest to lowest, was Self, Cosmetic Disabilities, Orthopedic Disabilities, Sensory Disabilities, Communication Disorders, Mental Handicaps, and Disabilities of Mobility. The order for scales, from highest to lowest again, was Evaluative, Understandability, Activity, and Potency. Lookouts apparently felt themselves most different from handicapped persons who have disabilities such as Cerebral Palsy and those with mental, emotional, and social deviance problems such as delinquency, and less different from those with cosmetic and orthopedic disabilities. They tended to rate all persons involved, including themselves, as more "good" or "beautiful", but less active or powerful.

It is more difficult to develop a clear picture of what is happening in the scales X categories interaction. Figure 9 was drawn up in order to show graphically some of the interrelationships. Since the evaluative factor "almost serves as a definition for the term 'attitude,' and consequently scales on the evaluative factor should serve well as measures of verbalized attitudes," (Nunnally, 1967, p. 537) mean distances from self were plotted by scale and category against the evaluation scores. Some interesting patterns emerge. The greatest distance from Self appears in the Activity scale means, with all six categories clustered in one general area, all with substantial distances from Self. Handicapped people are seen as less mobile than the Self, as perhaps more cut off or isolated from the active world, with the distance for Cerebral Palsied persons the most pronounced. Figure 10 shows the mean scale ratings for the scale X category interactions.

Potency scores for all six categories were also clustered, all near the self, but with one exception: cosmetic disabilities were rated as higher than Self on potency. This might be accounted for in the choice we made of adjective pairs for the Potency factor (light-heavy, large-small, strong-weak) and the two concepts which made up the category (facial disfigurement and obesity). Apparently the Ss see handicapped persons in most categories as only slightly less strong or powerful than themselves, but rate obese or facially scarred persons as heavier, stronger, and larger.

There was a noticeable but insignificant correlation (r=.53, df=4, t=1.25) between Understandability and Evaluation ratings for distance from Self by category. Categories which are more distant from the Self in Understandability are also seen as less "good" or valuable. This suggests that one approach to changing attitudes toward the handicapped might be in a public education and information program. The more understandable the handicapping condition is, the more positive a person's attitude toward it, and the less the handicapped person is seen as different from the Self.

Figure 9

Distance from Self

Category X Scale Interactions

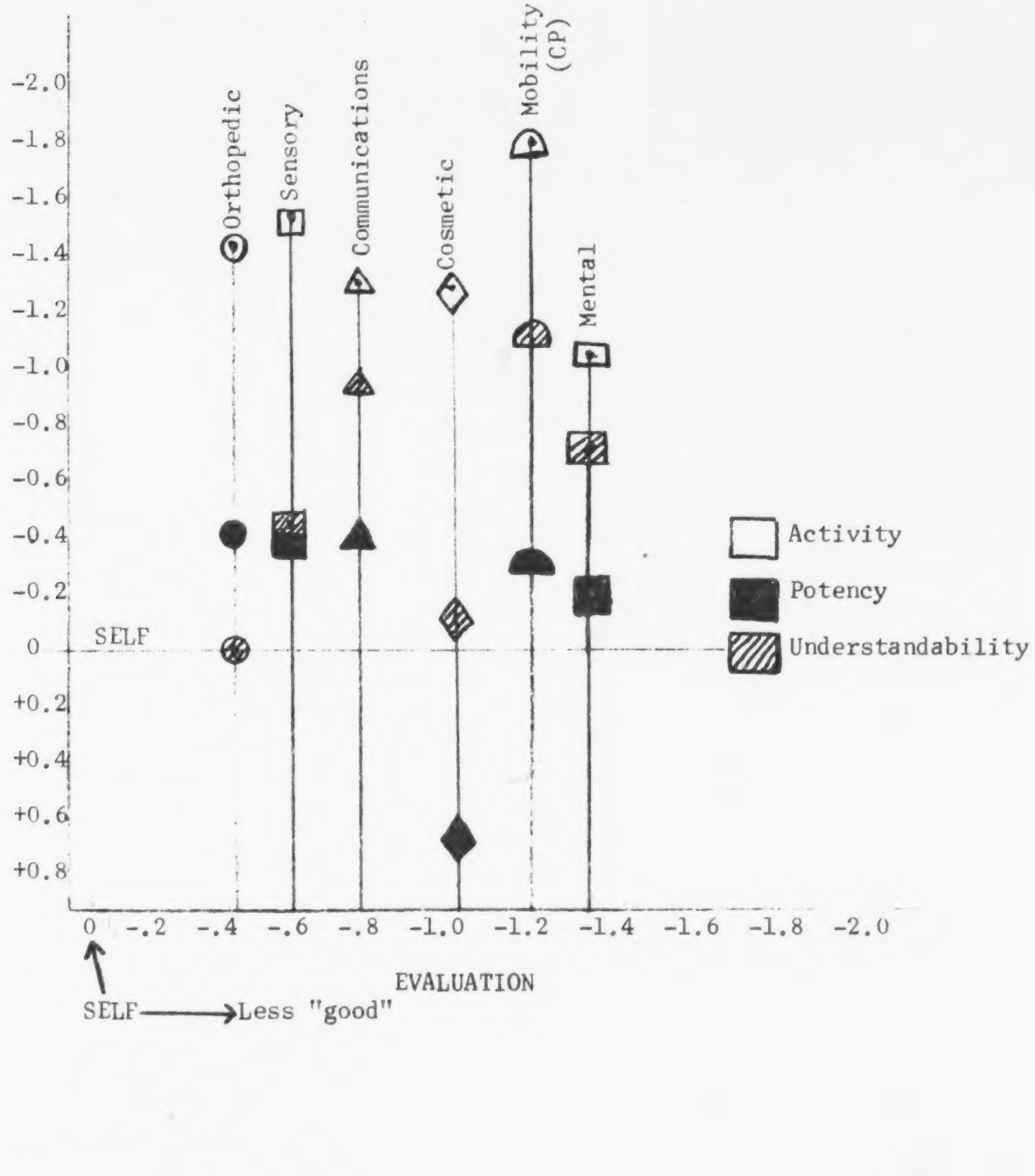
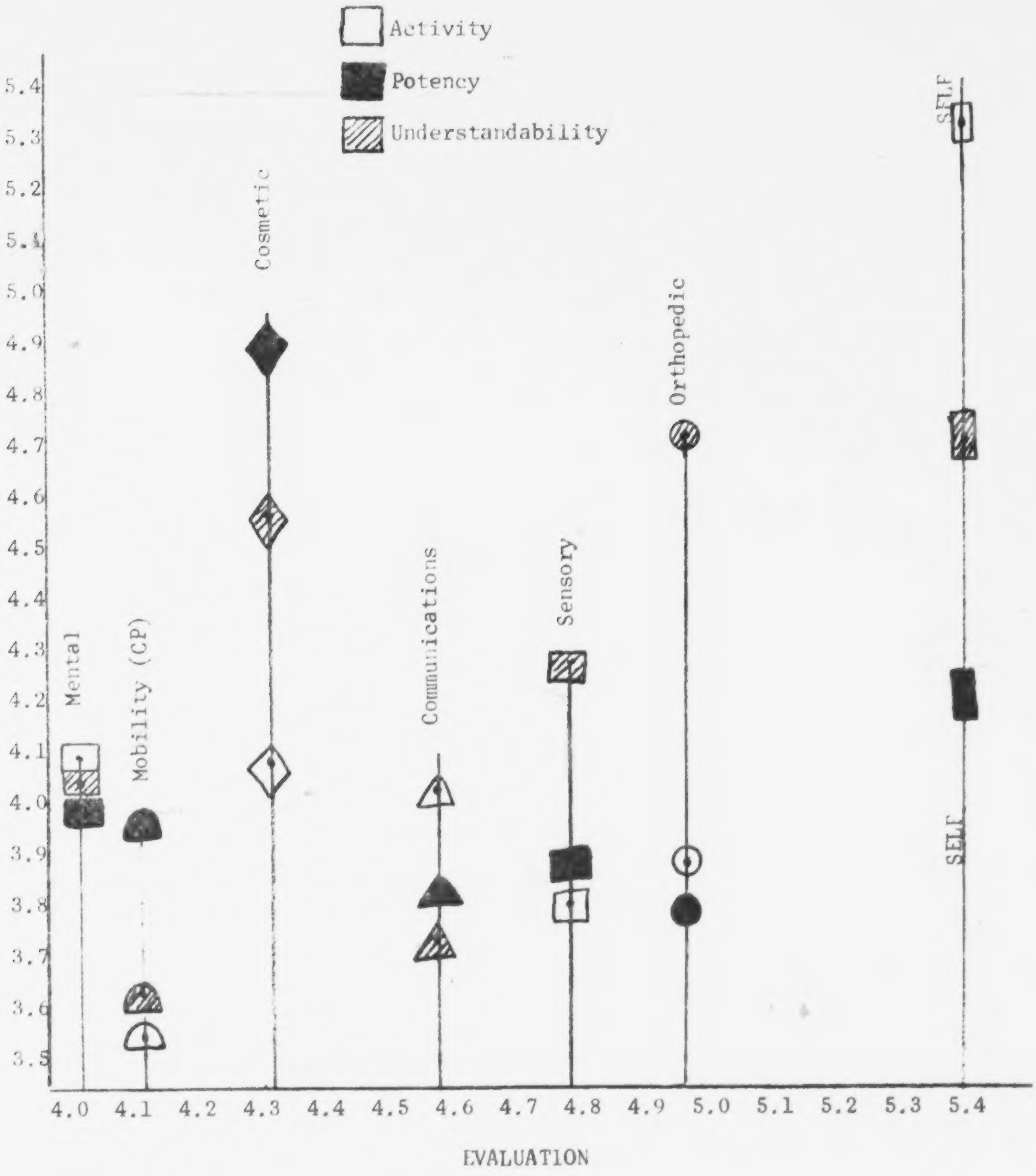


Figure 10

Mean Scale Rating

Category X Scale Interactions



Lookouts in Other Programs

To understand participants in Outlook Nashville programs and to see if changes occur following participation, Lookouts were tested at training sessions and retested about four months later. It was expected that attitudes toward the disabled should become more positive, and positive changes in self-concepts of Lookouts were also predicted.

Control groups have not been used in this testing because adequate control groups are not available. Since only volunteers participate in Outlook Nashville programs, effects on non-volunteers are not of practical interest. Pre-test comparisons of volunteers and non-volunteers from the same population can provide information on who volunteers, and such a study is reported in the section on volunteers. However, post-test comparisons of these groups, after volunteers had gained experience would not be meaningful. Volunteers might change over time differently than non-volunteers with or without participation in Outlook programs. To study effects of the program adequately, a sample of volunteers would have to be excluded from participation. Since volunteers are needed, this is not a feasible procedure at this time. In addition, denying volunteers the opportunity to participate might have an effect, and no control for this is possible. Thus, a non-experimental approach was taken.

Lookouts

Calvary Lookouts. Students from Calvary Methodist Church were trained as Lookouts to participate in a TNT Club (social-recreational club with half of the members who are handicapped and half who are Lookouts, or trained volunteers). There were eleven Lookouts (5 males and 6 females) given pretests. They were 12 to 17 years old with a mean age of 14.27. Post-tests were only obtained from seven of these Lookouts.

College Lookouts. Twelve students (6 males and 6 females) from Vanderbilt University were given behavior management training and fourteen students (3 males and 12 females) in special education at George Peabody College for Teachers were working in pairs with individuals who were handicapped. The Vanderbilt students ranged in age from 19 to 25 with a mean of 20.92 and Peabody students ranged in age from 18 to 20 with a mean of 18.93. All of these students were trained as Lookouts. Pretests were obtained from all of these students when they were trained, but post-tests were only obtained from nine of the college Lookouts.

Results and Discussion

Mean scores on self-esteem and attitude measures are presented in Table 28 for Lookouts who only took pretests and those who took pre- and post-tests. T-tests comparing retested subjects are also presented.

Self-esteem scores increased on both measures for Calvary Lookouts, but the increase was only significant on the Rosenberg. Since Lookouts who were not post-tested had higher pretest scores, the increase for

Table 28

Lookouts' Mean Scores

	Pretest Only	Pretest	Post-test	t-test	df	p<
Rosenberg Calvary Lookouts	7.92	5.14	9.57	-3.78	6	.01
Like Name Calvary Lookouts	2.25	1.29	1.57	-.60	6	n.s.
SPAI-HC Calvary Lookouts	26.21	22.29	28.29	-1.93	6	.10
College Students	27.83	23.78	20.33	1.67	8	n.s.
ATDP College Students	115.41	104.22	109.11	-1.36	8	n.s.

the retested group may have been a regression to the mean. However, it is possible that experience gained as a Lookout increases feelings of competence and self-esteem. This is especially likely for adolescents who are going through a number of changes and are less likely to have developed stable self concepts.

There were no significant changes in attitudes toward the disabled among college or Calvary Lookouts. There was a trend toward an increase in positive attitudes expressed on the SPAI-HC among Calvary Lookouts. However, the non post-tested Lookouts had higher pretest scores, so the same increase might not have occurred had we been able to give post-tests to all the Calvary Lookouts.

The expectation of increased positive attitude following experience may not be reasonable for all groups. Volunteers start with positive attitudes, so changes are less likely in such a group. In addition, experience can lead to more realistic attitudes which may be more negative. This is more likely to occur on the ATDP where respondents agree or disagree with statements than on the more projective measure, the SPAI-HC. However, even the SPAI-HC asks for some indication of relative similarity of disabled people, and contact may lead to the realization that people with disabilities really do differ.

More analysis of in depth records of volunteer activity, rather than paper and pencil inventories, is required to make more accurate statements about the effects of experience on volunteers in programs such as Outlook Nashville.

Attitudes Toward the Handicapped as a Function of Lookout Experience

Much of the research data collected in the two years of this project have been on attitudes toward the self and the handicapped and on changes in these attitudes after short (usually two to four months) intervals of contact with the handicapped in various settings. Little significant change has been noted on most measures used. In an attempt to determine whether the lack of measured change was a function of this very short time interval, an additional study was completed.

Procedure

Method. Test materials were mailed to 36 Lookouts who were designated as experienced on the basis of their being on Outlook Nashville's rolls for a year or more, and who had actively participated in some Outlook Nashville program during the past year. Materials mailed to them included a biographical information form and a semantic differential scale to measure attitudes toward the self and the handicapped. Twenty-seven (75%) returned the biographical forms, but only 24 (67%) returned completed and valid semantic differential scales.

Subjects. Three of the 27 respondents were boys, 24 were girls. The mean age was 15.4 and the mean educational level was grade 9.6 (all but two were still in school). Most were from middle class homes, with some from professional families and a few from semi-skilled occupations. Three were themselves handicapped, but worked as Lookouts with other handicapped people. Three of the Lookouts participated only in the TNT Clubs, three participated in both TNT and Park Program activities, 20 participated only in the Park Program, and one handicapped Lookout worked primarily as a speaker in orientation courses and has not recently been involved in either the Park Program or TNT Clubs.

Measures. Included in the biographical form was a very brief measure of self esteem consisting of the questions "What first name do you go by?" and "Do you like this name?" (Boshier, 1968). Subjects were asked to respond to the second question by indicating on a scale scored from -3 to +3 how well they liked or how strongly they disliked this name. This instrument had not been administered to the Lookouts before this spring. The average rating for the 27 Lookouts was 1.89, indicating that the average Lookout likes the name he or she uses (a rating of 1=somewhat like, 2=like), or that he has moderately high self-esteem.

Fifteen of the respondents who completed the semantic differential had also been tested at the 1971 summer park program. (A comparison of the 15 for whom both 1971 and 1972 tests were available and the nine for whom only 1972 tests were available found them not to differ significantly on the Like Name measure, but to differ significantly in age: $t=2.58$, $df=22$, $p<.05$. The mean age for the 15 Lookouts was 14.2; for the nine omitted from the main comparison it was 17.11. The four oldest in this last group were not involved in the park program. The scores of these nine Lookouts did not differ significantly from the other 15 on the 1972 semantic differential testing, so they are not reported separately.)

The 1971 version of the semantic differential used four factor scales or dimensions with three adjective pairs in each: Evaluation, Activity, Potency, and Understandability. The 1972 version added a fifth dimension--Social Stimulus Value--and included three adjective pairs in two of the factor scales and two pairs in each of the other scales. Only the first four scales are included in the comparisons. Eleven concepts (the Self plus ten handicapping conditions) were common to both versions, and it is on these common concepts that comparisons were made. The fifteen concepts other than Self can be grouped into categories of disabilities, five of them common to both versions, and it is on these five categories that comparisons were made: disabilities of mobility, such as are characteristic of cerebral palsy (persons who drool and persons who stagger when they walk are the concepts included in this category), orthopedic disabilities (persons who use braces or wheelchairs), cosmetic disabilities (persons who are very fat or who have facial disfigurement), sensory disabilities (the blind and the deaf), and disabilities of communication (persons with speech defects).

Results

The results of general balanced design analyses of variance have been consistent across groups. When analyses were based on concept, significant main effects have been found for scales and for concepts, and an interaction effect for scales by concepts. When based on category, there were significant main effects for scale and for category and an interaction of scales by categories, both on mean scale ratings and on distance from Self.

Three separate analyses were performed to determine whether a main effect for trials (1971 testing vs. 1972 testing of the same Lookouts) was significant. Table 29 shows the analysis of variance for trials by scales using only the concept of Self for comparison. The main effect for scales was significant (F=3.41, $p < .05$) with the mean scale ratings by scale as follows: Evaluative 6.01, Activity 5.82, Understandability 5.46, Potency 4.95. There was no significant main effect for trials. Indeed, the mean scale ratings across factor scales were almost identical: 1971=5.58, 1972=5.54.

Table 29

Analysis of Variance Table

Mean Scale Rating of Self by Trial and Scale

Source	df	MS	F	p<
Trials (A)	1	.037	< 1	n.s.
W/N Error	14	1.510		
Scales (B)	3	6.506	3.408	.05
W/N Error	42	1.909		
AXB	3	.031	< 1	n.s.
W/N Error	42	.870		

Table 30 is a summary of the analysis for distance from Self by category, scale and trial. As found in other studies, significant main effects were found for category ($F=13.05$, $p<.001$), scales ($F=4.80$, $p<.01$), and a significant interaction for category by scales ($F=13.39$, $p<.001$), but no significant main effect for trials. Mean distance from Self was -.996 for 1971 and -.905 for 1972. A significant three-way interaction was obtained, but it is quite complex and not interpretable, so it will not be discussed further.

Table 30

Analysis of Variance

Distance From Self by Category, Scale and Trial

Source	df	MS	F	P <
Trials (A)	1	1.293	<1	n.s.
W/N Error	14	15.461		
Category (B)	4	14.894	13.052	0.001
W/N Error	56	1.141		
Scale (C)	3	45.862	4.800	0.01
W/N Error	42	9.555		
AXB	4	.454	1.100	n.s.
W/N Error	56	.413		
AXC	3	7.924	1.763	n.s.
W/N Error	42	4.494		
BXC	12	6.861	14.393	0.001
W/N Error	168	.477		
AXBXC	12	.757	2.370	0.01
W/N Error	168	.319		

Table 31 shows a trials by concepts analysis of variance for generalized distance. In this case main effects were significant for concepts ($F=3.63$, $p<.001$) and trials ($F=5.04$, $p<.05$), and the trials by concepts interaction was also significant ($F=1.95$, $p<.05$). Mean generalized distance for 1971 was 3.50, for 1972 it was 4.43. Thus, experienced Lookouts showed less profile similarity with the handicapped on later testing. The differences in the direction of change for generalized distance and mean distance where the handicapped were rated as less distant, but not significantly so, can be accounted for by the fact that positive and negative scores in the mean distance measure cancel each other out because the sign is retained in the averaging; the generalized distance, a weighted change index, uses the squares of the distances for each concept, thus in effect disregarding the sign and enlarging the resulting number.

Table 31

Analysis of Variance

Generalized Distance for Each Concept by Trial

Source	df	MS	F	p<
Trials (A)	1	64.777	5.04	0.05
W/N Error	14	12.854		
Concepts (B)	9	4.457	3.63	0.001
W/N Error	126	1.229		
AXB	9	1.618	1.95	0.05
W/N Error	126	.829		

The mean distance for four factor scales and five categories of disability and the generalized distance for ten concepts common to both tests were rank ordered and comparisons made between the rankings for the two tests (Table 32). Lookouts rated handicapped persons as most distant from Self on the activity dimension both times. Potency moved from a ranking farthest from Self in 1971 to one rank closer in 1972. The evaluative dimension was ranked second most distant in 1971, but moved up to the rank nearest Self in 1972. Since "ratings on the evaluative dimension may be used as a generalized index of attitudes" (Lynch, 1972, p. 4), it may be said that Lookouts improved in their attitudes toward the handicapped.

In order of most to least distant from Self, the ranking by category remained the same both times: cerebral palsied persons, persons with communication disorders, persons with sensory disabilities, persons with orthopedic disabilities, and persons with cosmetic disabilities.

There was a little more variability in ranks for the generalized distance for individual concepts from the first to the second testing (Table 32) but the greatest change in rank was for the blind, which ranked eighth on the first test and second, or much more distant, on the second test. In all but one case--facial disfigurement--there was greater distance, or less identification with the handicapped, on the 1972 testing.

Noticeable, but not significant, correlations have been found on other testing between the evaluation and understandability dimensions, suggesting that greater understanding or knowledge of a handicapping condition may lead to more positive attitudes toward it, or that more positive attitudes lead to greater understanding. Correlations between these two factors on all sixteen concepts taken together were .34 (not significant) for the 1971 testing and .74 ($p<.01$) for the 1972 testing. When only the eleven concepts common to both tests were included in the correlation, the results were a little different: $r=.54$ ($p<.05$) for the 1971 testing, and $r=.59$ ($p<.05$) for the 1972 testing. Correlations for the individual concepts are shown in Table 33. The most striking

Table 32

Distance From Self in Rank Order

Scale	1971	1972
Activity	(1) -1.609	(1) -1.823
Evaluative	(2) -1.220	(4) -0.453
Understandability	(3) -0.843	(2) -0.861
Potency	(4) -0.311	(3) -0.481

Category	1971	1972
Cerebral Palsy	(1) -1.432	(1) -1.473
Communication Disorders	(2) -1.062	(2) -0.995
Sensory Disabilities	(3) -0.953	(3) -0.917
Orthopedic Disabilities	(4) -0.920	(4) -0.805
Cosmetic Disabilities	(5) -0.612	(5) -0.333

Generalized Distance

Concept	1971	1972
Staggers	(1) 3.933	(3) 4.640
Drools	(2) 3.867	(1) 5.367
Slow Learner	(3) 3.787	(5) 4.533
Fat	(4) 3.687	(6) 4.440
Wheelchair	(5) 3.493	(7) 4.420
Speech	(6) 3.460	(4) 4.567
Facial Scars	(7) 3.293	(10) 3.160
Blind	(8) 3.247	(2) 4.680
Braces	(9) 3.200	(8) 4.400
Deaf	(10) 3.007	(9) 4.060

change in correlation between evaluation and understandability was in the concept of Self, where the correlation was .135 (not significant) for 1971 and .65 ($p<.01$) for 1972. The mean scale rating on understandability was almost identical for the two testings (5.46 for 1971, 5.51 for 1972) whereas the scale rating for evaluation dropped from 6.09 in 1971 to 5.78 in 1972. The differences between these two correlations appears to be accounted for by the difference in spread of the scores, as shown in the scattergram in Figure 11.

Analyses of variance were performed comparing generalized distance and distance from Self for the experienced Lookouts (1972 testing) with

Table 33

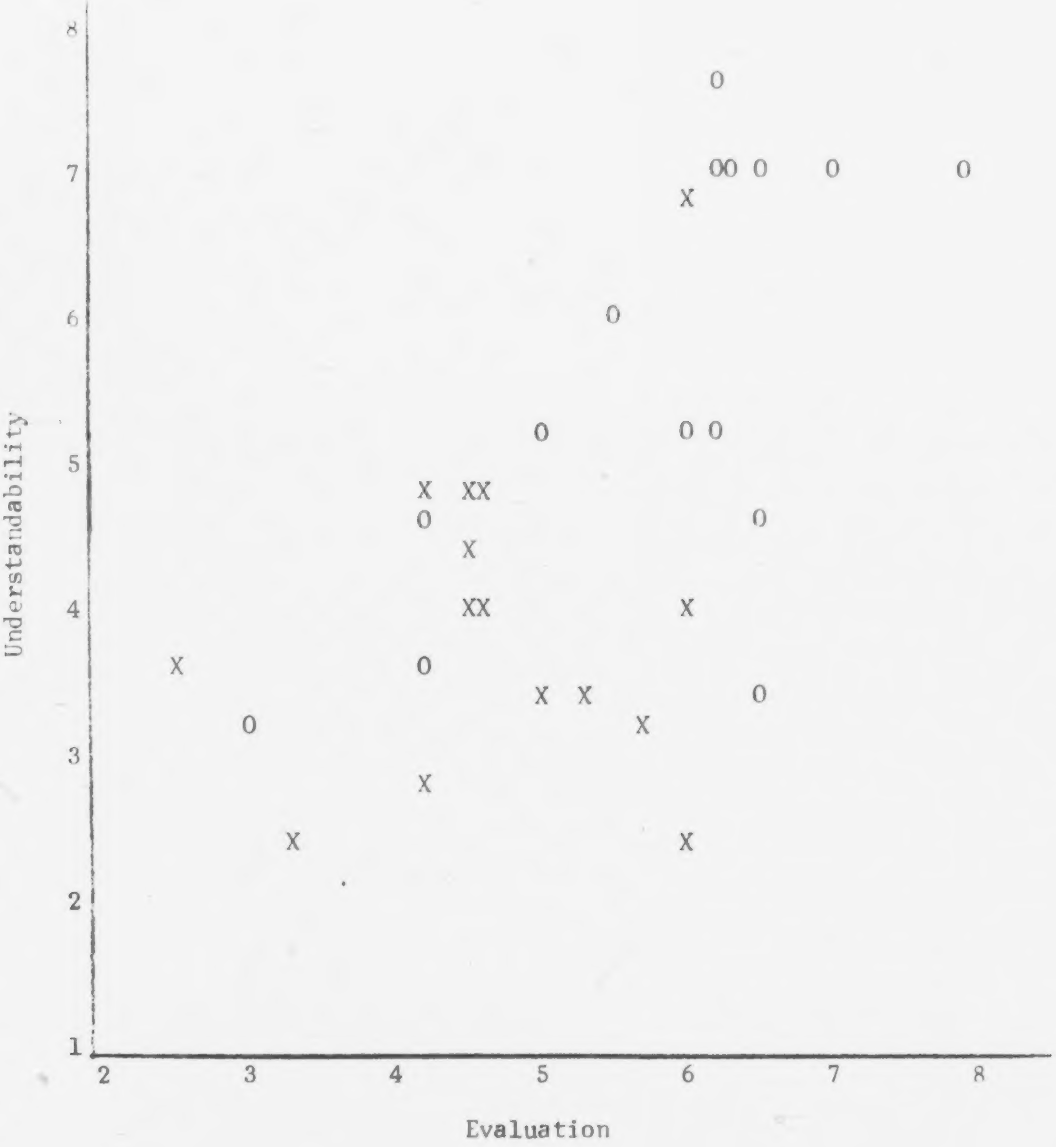
Correlations Between Evaluation and Understandability

Concept	1971			1972		
	Evaluation		Understand-ability	Evaluation		Understand-ability
	$\overline{X}$	r_{EU}	$\overline{X}$	$\overline{X}$	r_{EU}	$\overline{X}$
Self	6.09	.135	5.46	5.78	.65**	5.51
Deaf	5.30	.78***	4.50	5.79	.51*	4.13
Fat	4.75	.43	5.80	4.90	.25	5.67
Blind	5.26	.785***	5.00	5.94	.45	5.37
Staggers	4.55	.63*	4.16	4.89	.77***	4.50
Speech	5.12	.61*	3.98	5.49	.40	3.80
Face Scars	4.58	.66**	4.80	5.35	.64**	5.20
Slow Learner	4.67	.69**	4.82	5.24	.72**	4.20
Braces	5.61	.82***	4.89	6.02	.54*	5.33
Drools	4.12	.75***	3.81	3.68	.34	3.25
Wheelchair	5.57	.80***	5.14	5.95	.65**	5.37
11 Common Concepts	5.07	.54*	4.73	5.37	.59*	4.76
All 16 Concepts	4.97	.34	4.58	5.02	.74**	4.63

$*p<.05$ $**p<.01$ $***p<.001$

Figure 11

Mean Scale Ratings for Self
on Evaluation and Understandability



X 1971
O 1972

a group of students from Father Ryan High School who had not worked with the handicapped in Outlook Nashville's programs. The Father Ryan students were divided into two groups: 57 who volunteered to begin working with the handicapped and 84 who did not volunteer.

On generalized distance there was a significant main effect for groups ($F=3.55$, $p<.05$). The experienced Lookouts rated handicapped people as least distant from Self ($\overline{X}=4.48$), while the non-volunteers rated them as most distant ($\overline{X}=5.34$), and the volunteers were in between ($\overline{X}=4.90$). Table 34 summarizes the means for generalized distance by concept, and indicates the rank order with the greatest distance assigned the rank of 1 and the least distant ranked 15.

Table 34

Generalized Distance

Means Across Groups by Concept

($F=36.91$, $p<.001$)

Concept	Mean	Rank
A person who uses a cane to find his way	4.592	10
A person who is very fat	4.952	6
The type of person with whom I feel uncomfortable	6.109	2
A person who can't hear	4.228	13
A person who is very slow to learn	4.928	7
A person who wears braces on his legs	4.736	9
A person who drools saliva from his mouth	5.891	3
A person whose face is badly scarred	3.620	14
A person who can't talk plain	4.294	12
A person who staggers when he walks	4.826	8
A person who destroys property	6.388	1
A person in a wheelchair	4.541	11
A person who doesn't obey authority	5.604	5
Most people I know	3.177	15
A habitual criminal	5.742	4

For distance from Self, significant main effects were found for categories and for scales, and significant interactions for groups by scales, groups by categories, categories by scales, and groups by categories by scales (see Table 35). Table 36 summarizes the means for distance from Self by category, scale, and group by category, and indicates the rank order for them, again with most distant ranked 1 and least distant ranked 5 for scale and 9 for category. The category "Most People I Know" was rated more positive than self across all five factor scales by all three groups, with the exception of the social stimulus value scale, where it was rated almost the same as Self by all three groups. The ranks differed slightly for the three groups of subjects on categories of disability, except that all three rated "Most People I Know" as nearest the Self and persons with cosmetic disabilities as second nearest to Self.

Table 37 shows the mean distance from Self broken down by scale,

Table 35

Distance From Self, Group X Category X Scale

(Experienced Lookouts, Father Ryan Volunteers and Non-Volunteers)

Source	df	MS	F	p<
Groups (A)	2	50.824	1.34	n.s.
W/N Error	162	37.855		
Categories (B)	8	291.974	68.40	.001
AXB	16	7.593	1.78	.05
W/N Error	1296	4.269		
Scales (C)	4	217.062	17.56	.001
AXC	8	10.101	.82	n.s.
W/N Error	648	12.359		
BXC	32	50.089	52.20	.001
AXBXC	64	1.645	1.71	.05
W/N Error	5184	.959		

group and category. In general, but with some exceptions by individual categories or scales, the non-volunteers from Father Ryan rated handicapped persons as more distant from Self than either the volunteers from Father Ryan or the experienced Lookouts. Experienced Lookouts rated habitual criminals as more powerful and more active than the Self, persons with sensory disabilities and orthopedic disabilities as slightly more good and beautiful than Self, and persons with cosmetic disabilities as more understandable than Self. Father Ryan volunteers rated persons with orthopedic disabilities as slightly more understandable than Self. All three groups rate persons with cosmetic disabilities as more powerful than Self. (This last result may be explained by the make-up of the category--persons with facial scars and the obese--and by the make-up of the potency dimension--strong/weak and small/large.

Discussion

Significant differences between the 1971 and 1972 ratings for the experienced Lookouts would have suggested that the experience in working with the handicapped had had some effect, either negative or positive, in changing the attitudes of the Lookouts toward themselves or the handicapped. The fact that we did not find mean scale ratings or distances from Self to change significantly over the year could be explained in one of the following ways: 1) The Lookouts included in this study were all volunteers for the programs in which they were involved. As such, they can be assumed to already hold more positive attitudes both toward themselves and the handicapped with whom they have volunteered to work. There may therefore be less room for change in their attitudes as a function of the experience they gained. Indeed, we have found their attitudes to be more positive than those of two groups of non-volunteers. 2) It may also be true that the attitudes which were measured at the

Table 36

Distance From Self

Means by Category Across Groups

($F=68.40$, $p<.001$)

Category	Mean	Rank
Cerebral Palsy	-1.749	1
Orthopedic Disabilities	-1.045	6
Cosmetic Disabilities	-0.720	8
Sensory Disabilities	-0.970	7
Communication Disabilities	-1.119	5
Juvenile Offenders	-1.706	2
Most people I know	+0.403	9
Habitual criminals	-1.601	3
The type of person with whom I feel uncomfortable	-1.582	4

Means by Scale Across Group

($F=17.56$, $p<.001$)

Scale	Mean	Rank
Activity	-1.567	1
Evaluation	-1.201	3
Potency	-0.437	5
Understandability	-1.003	4
Social Stimulus Value	-1.396	2

Means, Group by Category

($F=1.78$, $p<.05$)

Category	Experienced Lookouts		Volunteers		Non-Volunteers	
Cerebral Palsy	-1.477	2	-1.772	3	-1.997	1
Orthopedic	-0.891	7	-0.959	6	-1.286	5
Cosmetic	-0.411	8	-0.781	8	-0.969	8
Sensory	-1.003	6	-0.816	7	-1.089	7
Communication	-1.100	5	-1.085	5	-1.220	6
Juvenile Offender	-1.356	3	-1.942	1	-1.819	3
Most People	+0.466	9	+0.353	9	+0.391	9
Criminal	-1.109	4	-1.874	2	-1.821	2
Uncomfortable	-1.672	1	-1.396	4	-1.677	4

Table 37

Distance From Self, Group by Category by Scale

(F=1.71, $p<.05$)

Scale	Group	Cerebral Palsy	Orthopedic	Cosmetic	Sensory	Communica-tion	Juvenile Offenders	Most People I Know	Habitual Criminal	Person I am Uncomfortable With
Act.	ExpLO	-2.029	-2.142	-1.142	-2.079	-1.562	-0.742	+0.604	+0.229	-1.313
	FRVol	-2.570	-2.284	-1.872	-1.965	-1.904	-1.728	+0.088	-1.184	-1.333
	NonVol	-2.898	-2.620	-2.235	-2.425	-1.857	-1.786	+0.119	-1.167	-2.232
Eval.	ExpLO	-1.517	+0.121	-0.758	+0.008	-0.396	-1.996	+0.704	-2.442	-1.837
	FRVol	-1.932	-0.330	-1.361	-0.286	-0.765	-2.433	+0.274	-2.939	-1.830
	NonVol	-2.258	-0.754	-1.645	-0.410	-0.887	-2.420	+0.507	-2.750	-2.106
Pot.	ExpLO	-0.821	-1.204	+0.562	-0.808	-0.417	-0.221	+0.062	+0.750	-0.583
	FRVol	-1.414	-1.104	+0.623	-0.411	-0.333	-1.098	+0.377	-0.596	-0.105
	NonVol	-1.305	-1.202	+0.394	-0.605	-0.708	-0.864	+0.327	-0.673	-0.423
Und.	ExpLO	-1.367	-0.158	+0.017	-0.679	-1.500	-1.742	+1.062	-2.167	-1.938
	FRVol	-1.270	+0.082	-0.439	-0.444	-1.123	-2.081	+0.825	-2.351	-1.974
	NonVol	-1.663	-0.495	-0.419	-0.845	-1.470	-1.920	+1.012	-2.143	-1.905
Soc.	ExpLO	-1.650	-1.071	-0.462	-1.458	-1.625	-2.079	-0.104	-1.917	-2.687
	FRVol	-1.675	-1.160	-0.854	-0.975	-1.053	-2.372	+0.202	-2.298	-1.737
	NonVol	-1.861	-1.361	-0.939	-1.161	-1.179	-2.105	-0.012	-2.375	-1.720

beginning of this experience were somewhat inflated by what these Lookouts felt to be the way they *should* feel toward handicapped people. In other words, they may have been responding to social pressures on the initial testing. After having close contact with many people such as those described in the semantic differential scale, the Lookouts may have developed attitudes toward them which are more realistic, and perhaps in some cases less artificially positive, than on the initial testing. 3) There is also the possibility that the semantic differential scale which we used does not adequately measure real change in attitudes.

Continued research is needed to determine whether Lookouts whose experience with the handicapped has itself been positive or negative have different amounts or directions of change in their scores. No attempt was made in this study to question Lookouts as to the quality of their experience or as to what benefits they felt they had gained through the experience, but a study of this sort would have been planned for the next year had the project been allowed to continue for a third year. Another area which should be investigated is whether experience with a particular type of handicapped person has the effect of changing the Lookout's attitude toward that particular handicap. More detailed study of the characteristics of Lookouts was under discussion for the third year of this project.

The fact that most of the Lookouts who participate in either the Park Program or TNT Clubs continue to do so year after year, and that some of them are encouraged by their experiences to plan careers in similar areas does indicate that they are gaining some rewards or satisfactions from their experiences which make them worthwhile.

Attitudes Toward Disabled Participants in Junior Achievement

It is often heard that contact with people who are different leads to acceptance. However, Bem (1970) has pointed out the qualification that equal status contact is necessary for prejudice reduction.

The experimental Junior Achievement project previously described provided a setting to test this hypothesis. In this project, jointly sponsored by Junior Achievement of Nashville and Outlook Nashville, handicapped teenagers participated in Junior Achievement. An Outlook Nashville orientation course was given to Junior Achievement advisors, and its value in changing their attitudes was also tested in this study

Finally, there is some indication that positive attitudes toward the self are necessary before acceptance of others is possible (English, 1971). This was also investigated.

Non-handicapped Junior Achievement (J.A.) participants provided a group engaged in equal status contact. Advisors to the J.A. companies, in contrast, were adults in a superior position to achievers. Thus, it was hypothesized that achievers would improve in attitudes toward the handicapped, while advisors would retain their attitudes or become more negative.

Method

Subjects. On each meeting night, a 20% random sample of Junior

Achievement companies was chosen, and all achievers in these companies who were present were tested. A total of 137 achievers were pretested. Post-tests were administered to company members present from the same companies. A total of 72 achievers were given post-tests; 43 of them had been pretested. All advisors present (53 for the pretests) were tested. Post-tests were administered to 30 advisors, 19 of whom had been pretested. The loss of subjects is due to people dropping out of J.A. and absenteeism.

Procedure. Demographic data was obtained from achievers and advisors. In addition, achievers completed the SPAI to provide a measure of attitudes toward people with disabilities (SPAI-HC) and self-esteem (SPAI-self), Like Name as a second measure of self-esteem (Boshier, 1968), and the Bialer-Cromwell locus of control scale (Bialer, 1961). Advisors completed the semantic differential measure of attitudes toward people with disabilities described in a previous section. All testing was done in groups. Anonymity was maintained using a code to identify retesting of the same individual.

J.A. meets on Monday through Thursday nights with different companies functioning each night. People with disabilities (13 from Tennessee School for the Blind, 14 from Tennessee Vocational School, 6 from Spencer Youth Center, 5 from Tennessee Youth Center and 1 homebound student) were placed in companies Monday through Wednesday nights only to provide a control group who did not have such contact (the Thursday night participants). Only one achiever with a disability was placed in a company. The orientation course was given to advisors who would work with Monday and Wednesday night companies. Testing was carried out on all nights as described above. The tests were administered after the orientation was given to the selected groups. Less cooperation was obtained from Thursday night advisors, so advisor control data is missing.

Results

Achievers. Table 38 presents separate mean scores on the four

Table 38

Mean Scores for Achievers

Measure	Pretest		Post-test	
	pre only	both	both	post only
	(N=94)	(N=43)	(N=43)	(N=29)
Like Name	1.90	1.56	1.72	1.88
SPAI-Self	22.57	24.30	24.58	23.65
Locus of Control	16.84	17.06	17.26	15.54
SPAI-HC	20.17	20.43	16.99	20.34

major measures taken on achievers (like name, SPAI-self, locus of control, and SPAI-HC) for those achievers who took the pretest only, the post-test only, and the pre and post-tests for those who took both. For each of these four measures, four sets of unweighted means analysis of variance were computed. For each analysis of variance subjects were divided into those who were in a company with a disabled achiever and those where no disabled achiever was in the company.[9]

Analyses of variance between pretested subjects comparing those who did and did not take post-tests showed few differences. There were no main effects for post-test--no post-test or disabled--no disabled on any of the four measures. However, two interactions showed up. On the SPAI-HC, there was a trend toward an interaction between these two variables ($F=3.55$, $df=1,133$, $p<.1$). The means are presented in Table 39. When there was a person with a disability in the company, those given only pretests had less positive attitudes. On the SPAI-self, there was also a significant interaction between these two variables ($F=4.57$, $df=1,133$, $p<.05$). The means are presented in Table 40. When no disabled achievers were in the companies, achievers who took the pretest only expressed less positive attitudes about themselves.

Table 39

Mean Pretest SPAI-HC Scores

	Disabled in Company	No Disabled in Company
	(N=23)	(N=20)
Took Post-test	22.09_b	19.7_{ab}
	(N=77)	(N=17)
No Post-test	17.22_a	23.12_b

Note.--Scores with a subscript in common do not differ significantly $p<.1$ ($LSD_{17,20}=4.63$, $LSD_{17,23}=4.49$, $LSD_{17,77}=3.79$, $LSD_{20,23}=4.35$, $LSD_{20,77}=3.51$, $LSD_{23,77}=3.36$).

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[9] For post-test subjects and those who were pre and post-tested, the information on whether or not a disabled achiever was in the company was available. Subjects who were only pretested were divided based on day of the week since most but not all companies on Monday through Wednesday included disabled achievers, and more exact information was not available.

Table 40

Mean Pretest SPAI-Self Scores

	Disabled in Company	No Disabled in Company
Took Post-test	(N=23) 22.87_{ab}	(N=20) 25.05_{b}
No Post-test	(N=77) 25.73_{b}	(N=17) 19.41_{a}

Note.--Means with a subscript in common do not differ significantly $p<.05$ ($LSD_{17,20}=5.39$, $LSD_{17,23}=5.22$, $LSD_{17,77}=3.92$, $LSD_{20,23}=5.06$, $LSD_{23,77}=3.92$).

Analyses between post-tested subjects comparing those who did and did not take pretests also showed few differences. There were no main effects or interactions for like name, SPAI-self, or SPAI-HC. On locus of control, those post-tested achievers who had taken pretests ($\overline{X}=17.21$) were significantly more internal ($F=7.00$, $df=1,68$, $p<.05$) than those only post-tested ($\overline{X}=15.54$).

Analyses of variance comparing those who only took pretests and those who only took post-tests showed no significant differences (main effects or interactions) on any of the measures.

The final set of analyses of variance was of the form subjects (disabled-no disabled X advisors with course-no course) X trials--pre-post. There were no significant effects for either of the self-esteem measures (SPAI-self and like name) or for locus of control. That is, achievers did not change in self-esteem or locus of control between pre and post-tests.

On the SPAI-HC, there was a significant main effect for trials ($F=4.71$, $df=1,39$, $p<.05$). Achievers showed less positive attitudes on post-testing ($\overline{X}=16.99$) than on pretesting ($\overline{X}=20.43$). In addition, there was a trend toward an interaction of all three variables--whether a disabled achiever was in company, whether advisor was given a training course, and trials--($F=3.98$, $df=1,39$, $p<.1$). The means corresponding to this interaction are shown in Table 41. Significant decreases in positive attitude from pretest to post-test occurred for all groups except those where no disabled were in the company and the advisor had been given a course. Achievers in a company where there was a disabled achiever and the advisors had been given a training course had significantly less positive attitudes on post-testing than all other achievers, although they did not differ significantly on pretesting.

Table 41

Mean SPAI-HC Score

Achievers who were Retested

	No Disabled in Company		Disabled in Company	
	Advisor No Course	Advisor Course	Advisor No Course	Advisor Course
Pretest	21.43_{cd}	18.77_{bc}	23.11_{d}	18.4_{bc}
Post-test	16.86_{b}	21.15_{cd}	20.17_{bc}	9.8_{a}
Cell Size	N=7	N=13	N=18	N=5

Note.--Means with a subscript in common do not differ significantly $p < .1$ ($LSD_5=5.29$, $LSD_{5,7}=5.04$, $LSD_7=4.45$, $LSD_{5,13}=4.45$, $LSD_{5,18}=4.24$, $LSD_{7,13}=3.95$, $LSD_{7,18}=3.78$, $LSD_{13}=3.28$, $LSD_{13,18}=3.02$, $LSD_{18}=2.77$).

To provide another means of interpreting the data, for people who took both pre and post-test, the number of subjects who increased, remained the same and decreased was computed for each of the measures. This data is presented in Table 42. Separate Chi squares computed for

Table 42

Junior Achievers Changes
From Pretest to Post-test

		Like Name	SPAI-Self	SPAI-HC	Locus of Control
No Disabled in Company	Decreased	4(20%)	9(45%)	8(40%)	6(30%)
	Unchanged	12(60%)	4(20%)	4(20%)	4(20%)
	Increased	4(20%)	7(35%)	8(40%)	10(50%)
Disabled in Company	Decreased	2(9%)	11(48%)	12(52%)	7(30%)
	Unchanged	15(65%)	3(13%)	6(26%)	6(26%)
	Increased	6(26%)	9(39%)	5(22%)	10(43%)

each of the four measures showed no significant difference in pattern whether or not the achiever was in a company with a disabled achiever.

Advisors. The semantic differential is scored to provide three major measures indicative of attitude toward people with disability--mean scale rating for each disability category and scale, distance from self for each disability category and scale, and generalized distance for each disability concept summed over scale. Table 43 presents the mean scores for advisors who took the pretest only, the post-test only, and the pre and post-tests for those who took both. In the table, mean scale rating and distance from self are averaged over scale and category, and generalized distance is averaged over disability concepts.

Table 43

Mean Scores for Advisors

Measure	Pretest		Post-test	
	pre only	both	both	post only
	(N=34)	(N=19)	(N=19)	(N=11)
Mean Scale Rating	4.45	4.51	4.29	4.14
Distance From Self	-2.00	-1.66	-2.27	-1.78
Generalized Distance	5.61	5.25	6.51	5.94

For each of the three measures four analyses of variance were computed analogous to those described for achievers. For mean scale rating and distance from self, scale (e.g., evaluation, potency) and category (e.g., blind, cerebral palsy) were included as factors. Main effects for category and scale and interactions between these two variables have been found in previous use of this instrument as already described. These are generally complex and provide information about the structure of attitudes. Similar findings from J.A. advisors' data will not be discussed at this time except as they interact with the factors under major consideration here.

As previously mentioned, little data was available from Thursday night advisors who were to serve as control subjects since disabled achievers were not assigned to Thursday night companies. All advisors were, thus, considered to be in companies with disabled achievers; in several instances where this was not the case, advisors' data were omitted.

There were no significant differences on any of the measures between the pretests of those advisors who did and didn't take post-tests or between the post-tests of those advisors who did and didn't take pretests.

Analyses of variance comparing the pre and post-tests of those taking only one test showed significant differences. Mean scale ratings were significantly lower ($F=6.02$, $df=1,43$, $p<.05$) for the post-test group ($\overline{X}=4.14$) than for those only pretested ($\overline{X}=4.45$). There were no significant differences between these groups on distance from self or generalized distance.

Analyses of variance comparing pre and post-tests of those advisors who were retested showed changes. For mean scale rating, there was a main effect for trials ($F=11.31$, $df=1,18$, $p<.01$). Advisors showed less positive attitudes on post-testing ($\overline{X}=4.29$) than on pretesting ($\overline{X}=4.51$). There was also a significant interaction ($F=4.37$, $df=4,72$, $p<.01$) of trials X scale. The means corresponding to this interaction are shown in Table 44. The decrease in positive attitude is only significant for understandability and social stimulus value. There was also a significant trials main effect ($F=8.95$, $df=1,18$, $p<.01$) for distance from self. Disability categories were rated as more distant from self on post-testing ($\overline{X}=-2.27$) than on pretesting ($\overline{X}=-1.66$). Generalized distance was also significantly greater ($F=6.66$, $df=1,18$ $p<.05$) on post-testing ($\overline{X}=6.51$) than on pretesting ($\overline{X}=5.25$).

Table 44

Mean Scale Value

Advisors Retested

	Scales				
	Activity	Evaluation	Potency	Understand-ability	Social Stimulus Value
Pretest	4.17_{cd}	4.66_{ab}	4.54_{abc}	4.40_{abc}	4.79_{a}
Post-test	4.19_{cd}	4.46_{abc}	4.47_{abc}	3.97_{d}	4.35_{bcd}

Note.--Means with a subscript in common do not differ significantly $p<.1$ ($LSD_{19}=.4$). For $p<.05$, $LSD_{19}=.518$.

For generalized distance, the number of people who increased or decreased[10] was computed. Assuming that by chance 50% would fall in each group, the significance level of each proportion was computed (Bruning and Kintz, 1968, p. 197-198). The data are presented in Table 45. For 5 of the 15 concepts, the proportion of advisors rating the concepts as

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[10] One instance where scores remained the same was included among decreases.

Table 45

Generalized Distance of Advisors
Changes from Pre to Post-test

	Uses Cane	Fat	Person With Whom Uncomfortable	Hearing Problem	Slow Learner	Braces	Drools	[illegible].red
Increases	15(.79)	13(.68)	11(.58)	13(.68)	10(.53)	14(.74)	12(.63)	13(.68)
Decreases	4	6	8	6	9	5	7	6
Z	2.5	1.57		1.57		2.09		1.57
p<	.05	n.s.	n.s.	n.s.	n.s.	.05	n.s.	n.s.

	Speech Disability	Staggers	Destroys Property	Wheelchair	Doesn't Obey	Most People	Habitual Criminal
Increases	14(.74)	15(.79)	9(.47)	13(.68)	10(.53)	14(.74)	12(.63)
Decreases	5	4	10	6	9	5	7
Z	2.09	2.5		1.57		2.09	
p<	.05	.05	n.s.	n.s.	n.s.	.05	n.s.

more distant was significantly higher than would be expected by chance. On all but one of the 15 concepts, half or more of the advisors rated the concept as more distant on post-testing. There were no differences on any of the three measures between advisors who did and didn't receive an orientation course. Their pretest attitudes didn't differ, nor did they differentially change attitudes.

Discussion

Achievers. Contrary to expectation, achievers showed less positive attitudes toward people with disabilities on the SPAI following J.A. experience. This did not differ significantly depending on whether or not the achiever was in a company with a disabled achiever. However, on post-testing, the least positive attitudes seem to be expressed by those with disabled achievers in the company ($\overline{X}=15.48$) compared to those with no disabled achiever in the company ($\overline{X}=18.51$). This is evident in the more complex three-way interaction including whether or not company advisors had an orientation course. The largest decrease on post-testing was in the group where a disabled achiever was in the company and the advisor had taken a course. The group where the advisor had taken a course but there was no disabled achiever in the company actually increased in positive attitude (although the difference was not significant).

This does not appear to be *merely* a testing effect since there was no significant difference between mean post-test scores for these achievers and the post-test scores of achievers who were not pretested. However, the post-test scores of those subjects not pretested do appear to be higher, so the effect may be partially an artifact of retesting. It may also be that experience leads to a more realistic view of people with disabilities, and this may appear as a more negative attitude on tests.

The fact that there were no significant changes from pre to post-test on any of the other variables lends additional weight to the argument that the SPAI-HC drop was more than a testing artifact.

Two differences between pretest scores of achievers who were and were not post-tested deserve comment. Subjects not post-tested in companies with a disabled achiever had less positive pretest attitudes than those who were post-tested. Since most of the people who were not post-tested had dropped out of J.A.,[11] this suggests that some achievers with negative attitudes toward people with disabilities may have dropped out because of these negative attitudes when assigned to a company with a disabled achiever. Another interesting drop-out phenomenon is suggested by pretest SPAI-self data. Achievers who were not post-tested and had no disabled in the company had less positive attitudes about themselves. These achievers who were not post-tested may have dropped out of the program because J.A. offers a competitive atmosphere and those who remain must be self-confident and feel competent in order to compete. When there is a disabled achiever in the company, the less confident people may feel more secure and remain in the company because, compared to the disabled achiever, they may feel competent.

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[11] Exact data was not available on whether achievers were merely absent or had dropped out, since we had retained anonymity during initial testing. However, a number of achievers do drop out of the program so it is believed that most of our subject loss is due to this group. Anonymity also precluded attempts at follow-up testing of absent achievers.

Since all of this drop-out data explanation is post-hoc, further evidence is necessary to draw firm conclusions. Replication of the effect where the actual J.A. drop-outs versus absentees are known would be necessary. In addition, some means of following up drop-outs to try to get at their reasons might further enlighten the data.

Finally, the fact that post-tested achievers who were pretested had a more internal locus of control than those not pretested is difficult to explain. Subjects not pretested either joined J.A. late or were absent from our initial testing session. Since internals are more likely to take action in a situation (Lefcourt, 1966), they may have been more likely to join J.A. early.

Advisors. As predicted, advisors rated disabilities more negatively on post-test than on pretest. This showed up in all three scores on the semantic differential--lower mean scale ratings, greater distance from self, and greater generalized distance. In addition, non-parametric data on generalized distance showed a large number of advisors rating disabilities as more distant. As in the case of the achievers, this negativity may be a more realistic attitude on the part of the advisors. These changes occurred primarily on the understandability and social stimulus value scales. The latter consists of items on which working with disabled achievers would have given the advisors information.

Similarly, in comparing those advisors who were pretested only to those who were post-tested only, those who only took the post-test had lower mean scale ratings. This helps establish that the previously reported increase in negative attitudes is not just a testing effect.

Summary. Thus, there is an indication that advisors and achievers express more negative attitudes towards people with disabilities after contact with disabled achievers. It is suggested that this may indicate more realistic attitudes, and thus, is not necessarily a bad result of the program.

There is some indication that the Outlook Nashville orientation course has an effect, but the ramifications are less clear. There were differences in attitude change for achievers dependent on whether their advisors had a course and whether a disabled achiever was in the company. However, there were no differences between advisors who did or didn't take the course, so the course has no direct effects on attitudes as measured here. There is, thus, no evidence that an orientation course is necessary in continuation of this program.

There was no support for the proposition that more positive self attitudes are related to acceptance of people with disabilities.

These data alone are not sufficient to evaluate the experimental program. Observational data have been collected and are reported in a later section. This should provide further information on outcomes of the program.

Comparison of Groups on Distance From Self by Category and Scale

In work with summer park program Lookouts described in an earlier section, an interesting relationship was found between the understandability and evaluation factors on distance from Self, such that the less distant from Self each category of disability was found to be on understandability, the less distant it was on the evaluation factor. This suggests that knowledge about and experience with the handicapped may lead to greater acceptance and more positive evaluations of the handicapped. To test whether this relationship holds up across groups of subjects, three groups were compared: experienced Lookouts (N=24), high school students from Father Ryan High School (N=143), and adult advisors in Junior Achievement companies (N=57). Graphs were drawn plotting the distance from Self on activity, potency, understandability, and social stimulus value against the scores on evaluation. Separate graphs first were drawn for each category of disability showing the relationships between these factors for the three different groups (Figures 13-22), and then a summary graph was drawn showing only the evaluation and understandability scores for all categories and all three groups (Figure 12).

The summary graph shows the relationships between the three groups and the nine categories when understandability is plotted against evaluation. Three different clusters of categories can be readily seen. The first consists of only one category: "Most People I Know." This category was consistently rated more understandable than Self, and except for the J.A. advisors, rated more good or beautiful than Self. Advisors rated most people as just slightly less good or beautiful than Self. The second cluster consists of four categories: orthopedic, sensory, cosmetic, and communication disabilities. These are the disabilities which might be considered most common or familiar to these subjects. They are, in general, rated less understandable and less good or beautiful than Self. The third cluster includes handicapping conditions of the cerebral palsy type, habitual criminals, juvenile offenders, and a category called "The person with whom I am most uncomfortable." These are persons who are generally considered socially unacceptable by most people, and those with very visible and rather bizarre physical characteristics, and they are rated as most distant from Self on both evaluation and understandability.

The most noticeable difference between groups is seen in the greater mean distance from Self on understandability and evaluation for the J.A. advisors. On all categories of disability the advisors showed greater distance on both these factors than did either of the other two groups. On all nine categories the high school students were more distant from Self on evaluation than were the Lookouts, but this relationship was not consistent on understandability. On some categories the students' understandability scores were almost identical to those of the Lookouts. On some they were slightly less distant from Self, and on others slightly more distant from Self than were the Lookouts.

The finding reported earlier (that the more negative the evaluation rating the more negative the understandability rating) seems to hold up across groups. The differences in the ratings for the three groups may be accounted for in the differences in the three groups themselves. The

Figure 12

Distance From Self

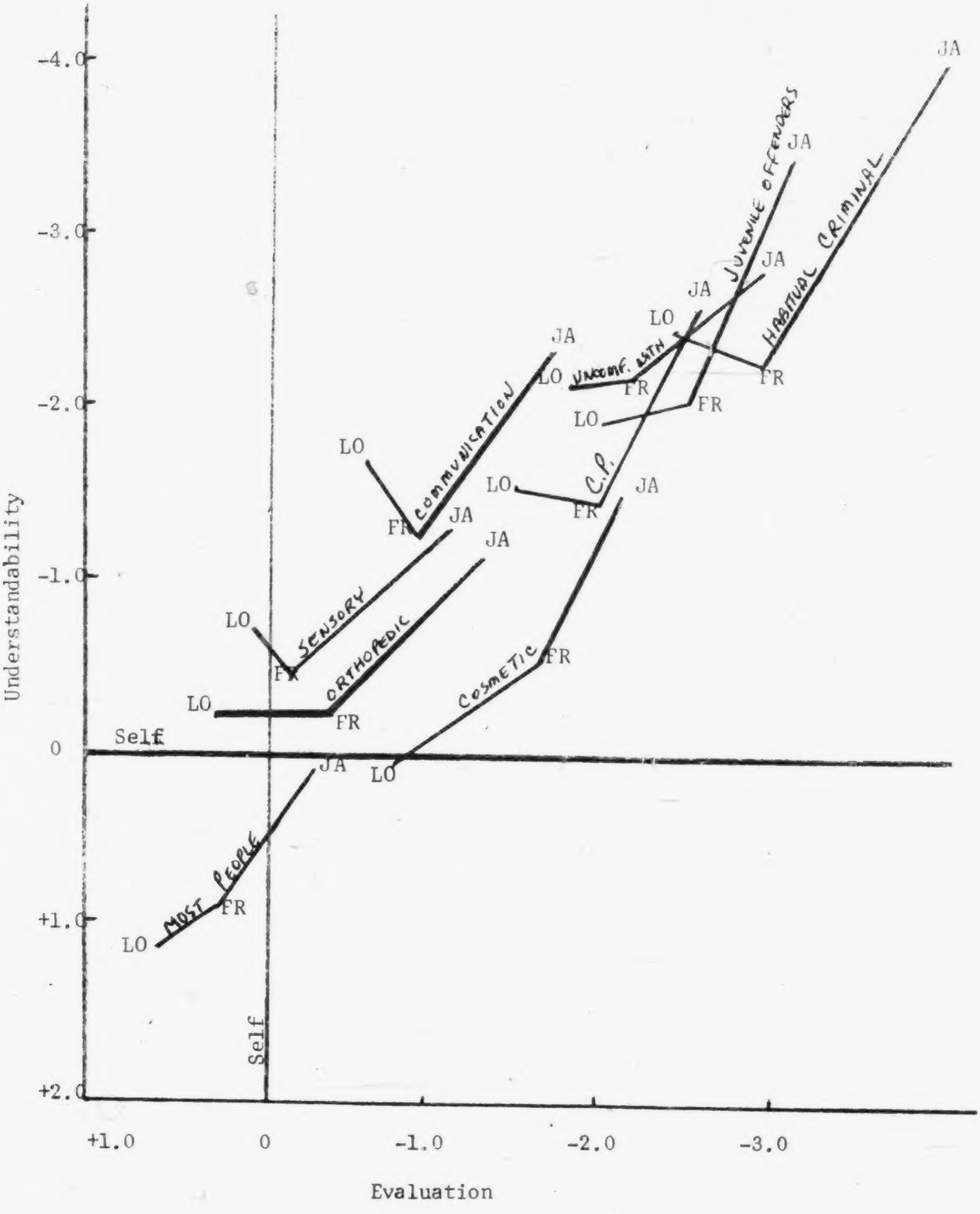


Figure 13

Distance From Self-Cerebral Palsy

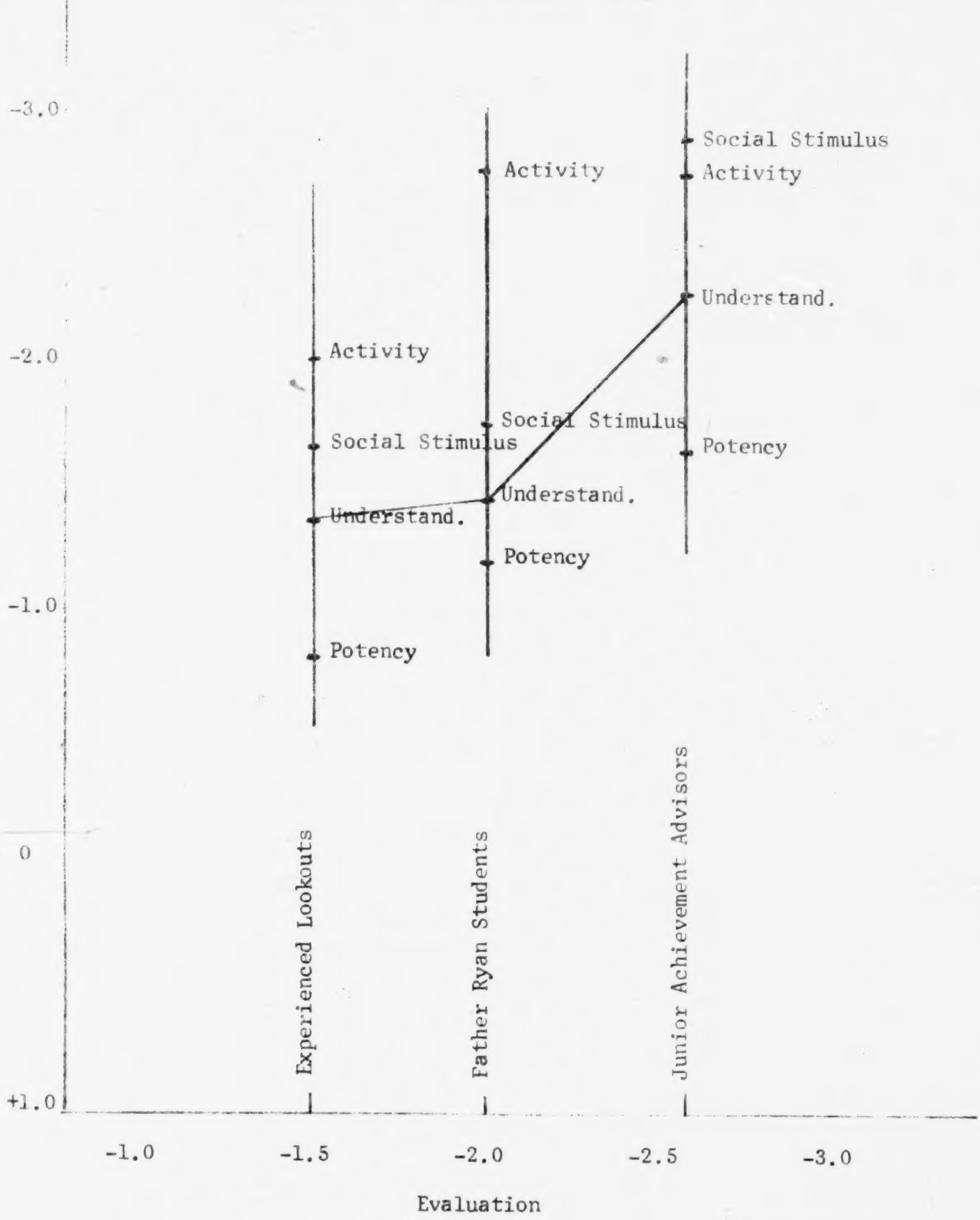


Figure 14

Distance From Self-Most People I Know

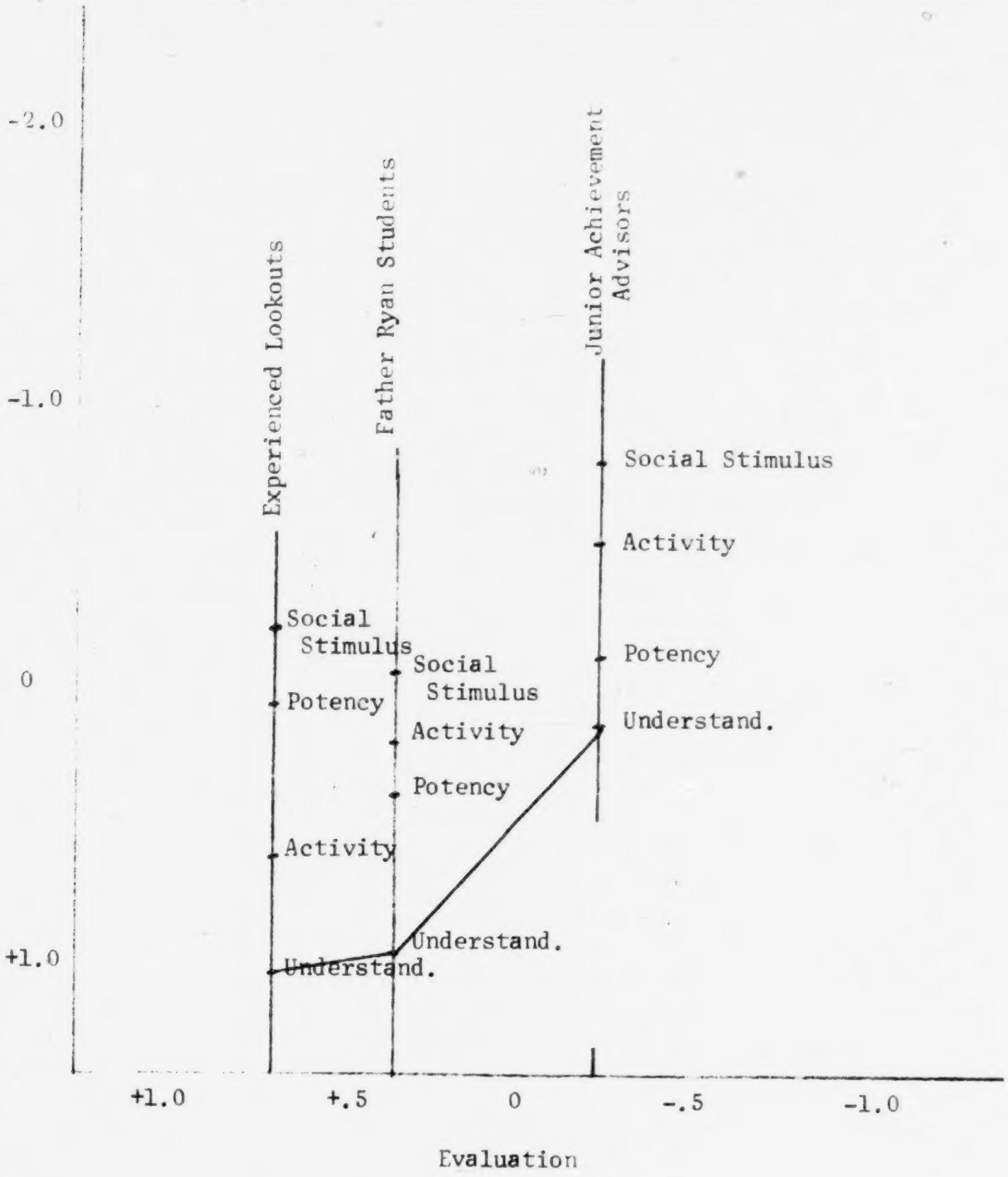


Figure 15

Distance From Self-Juvenile Offender

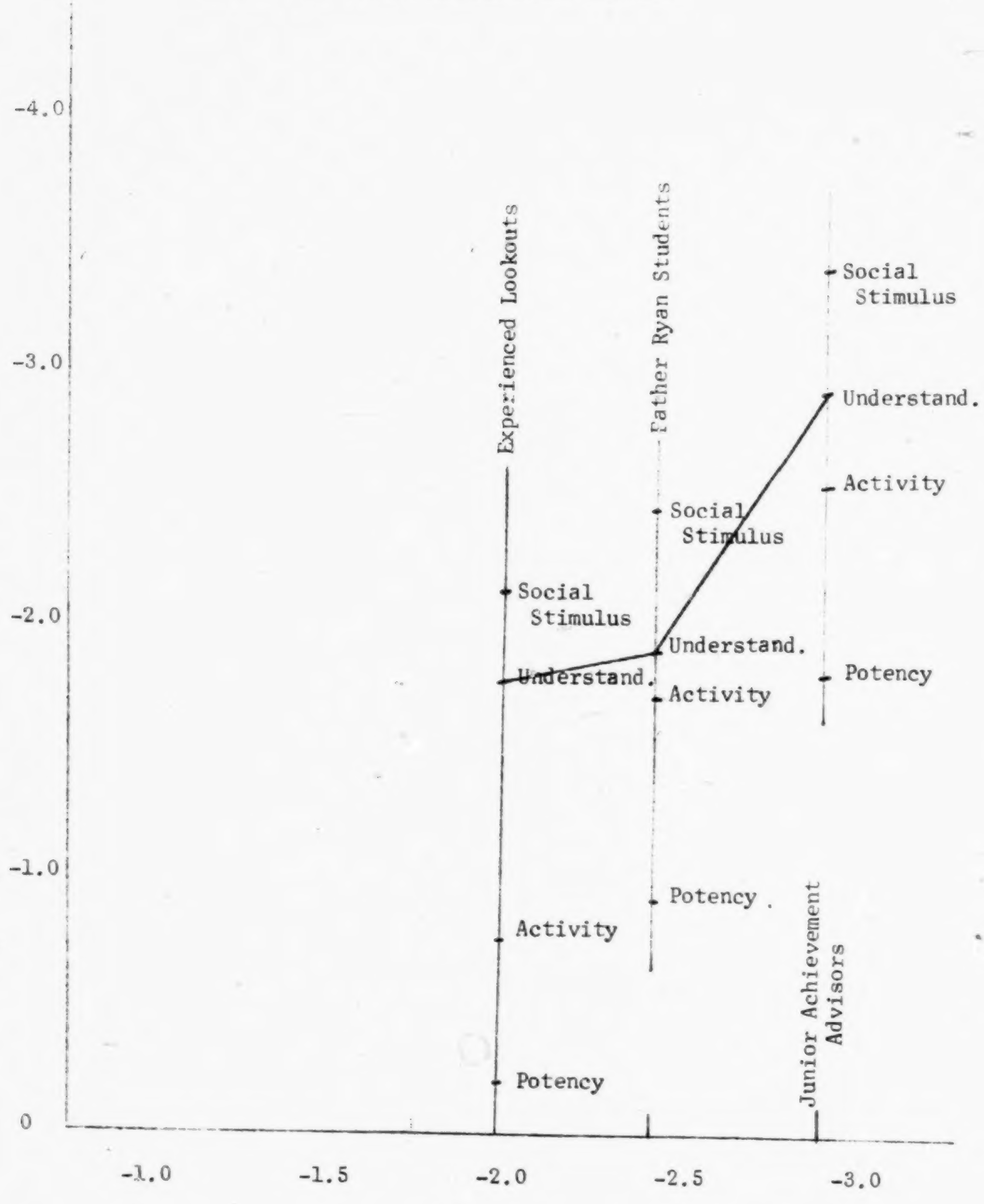


Figure 16

Distance From Self-Habitual Criminal

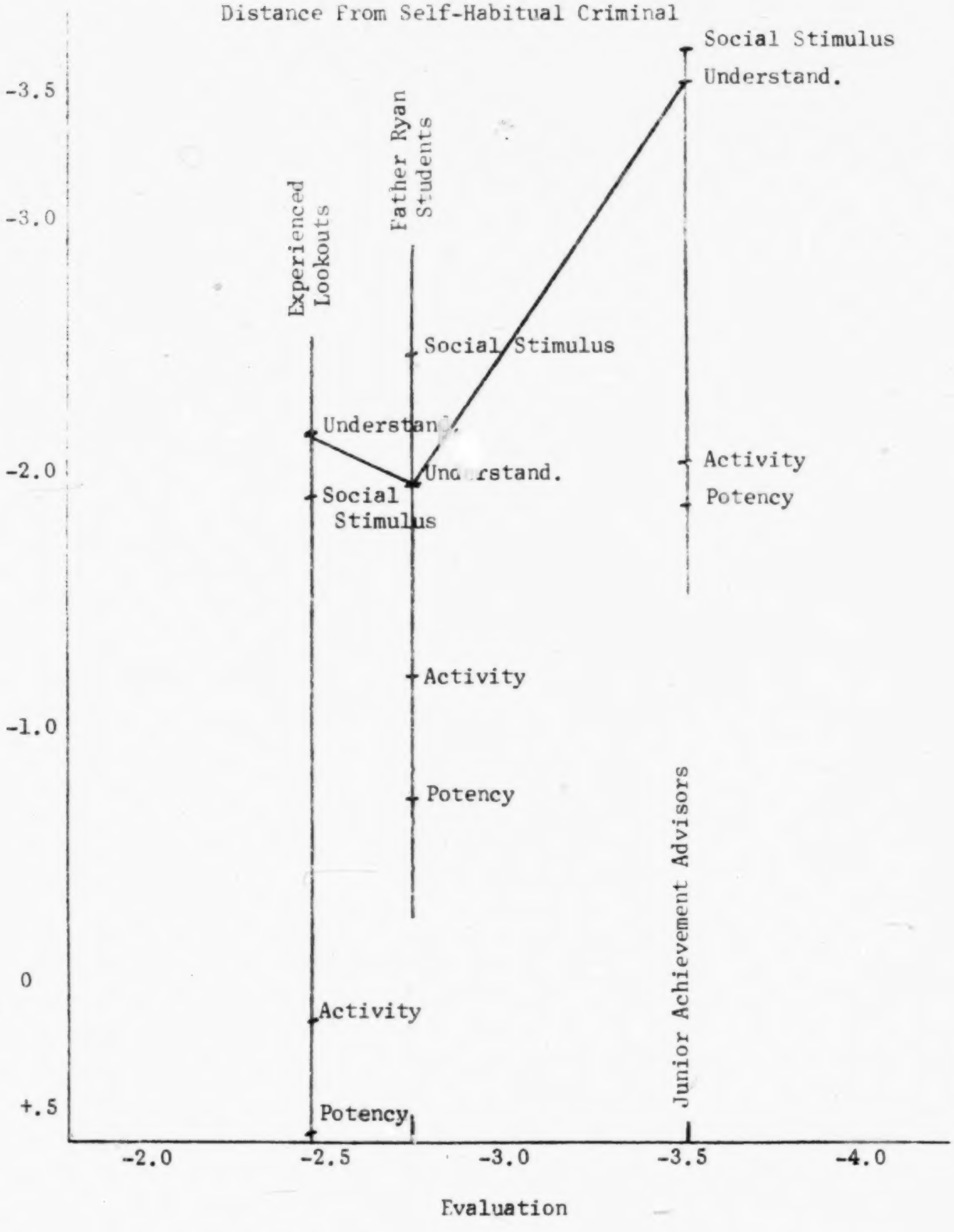


Figure 17

Distance From Self-Person With Whom I Am Uncomfortable

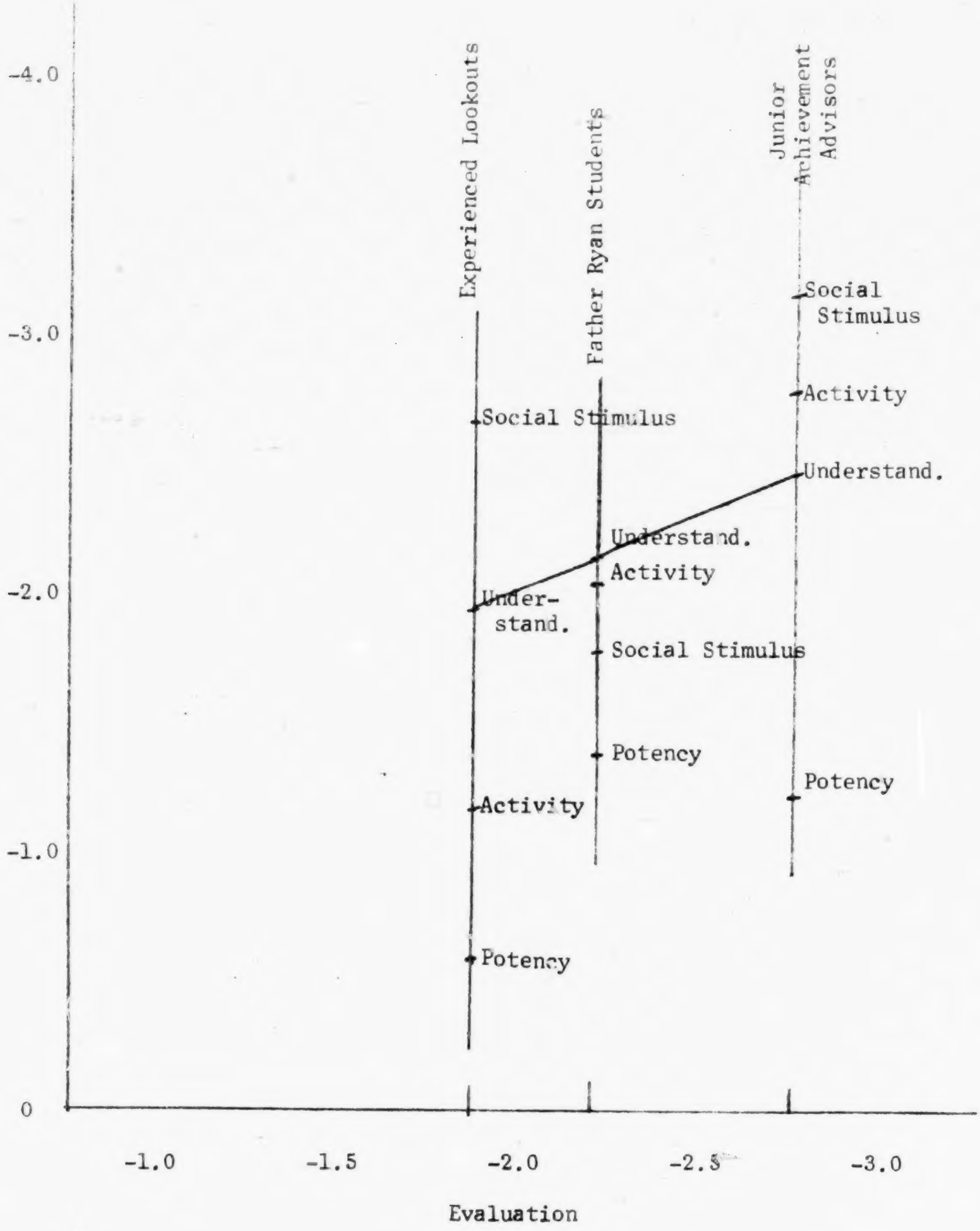


Figure 18

Distance From Self-Sensory

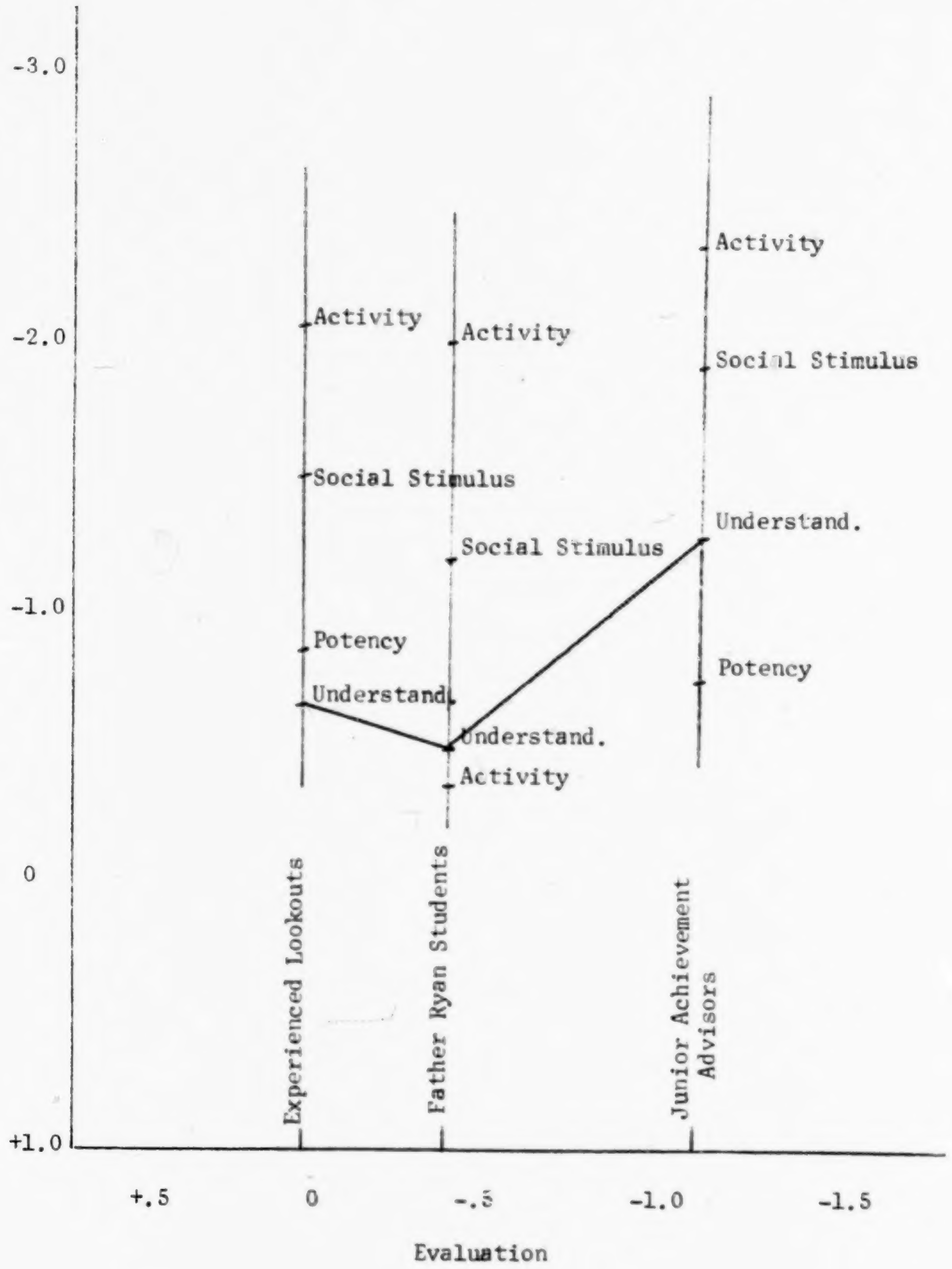


Figure 19

Distance From Self-Communication

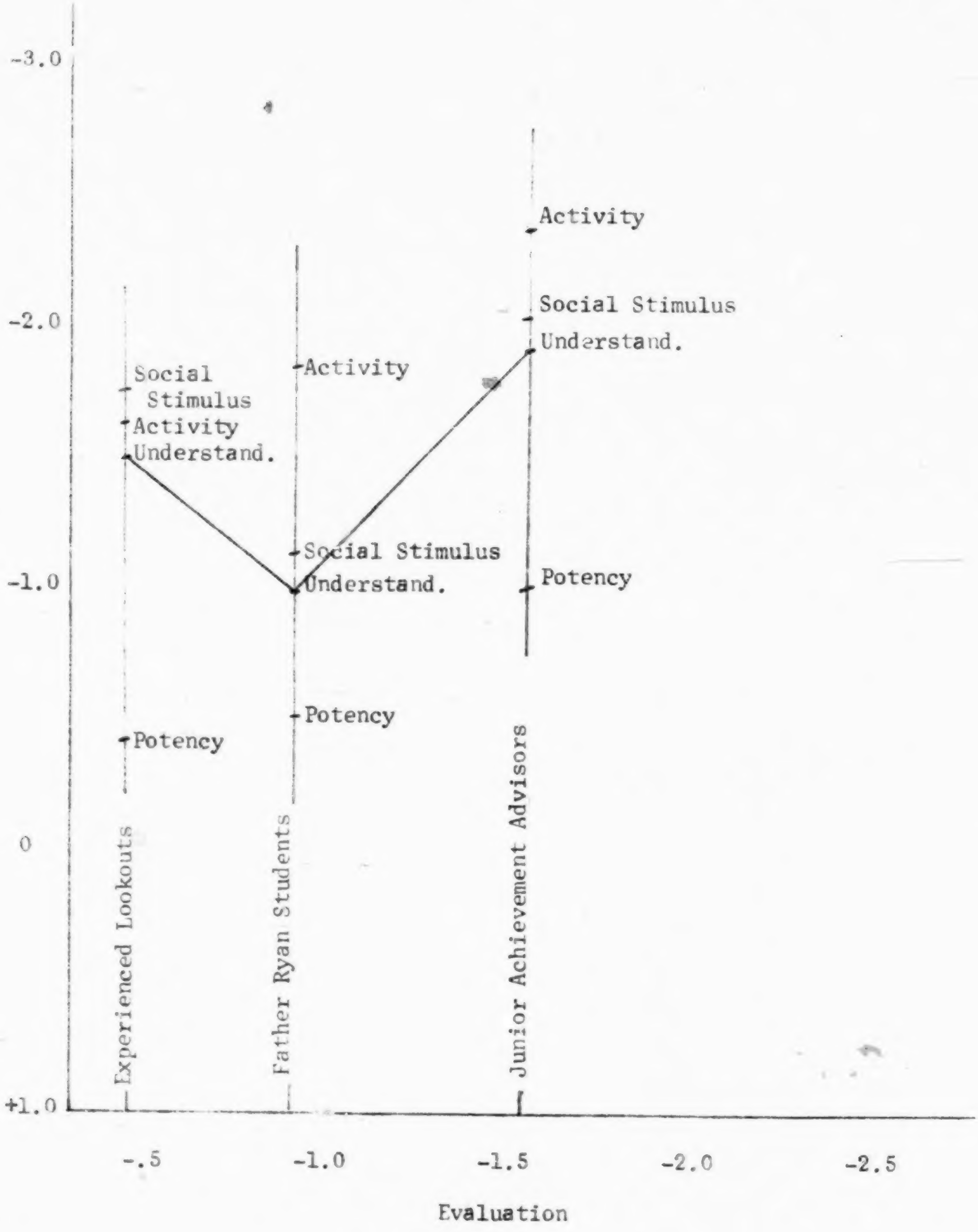


Figure 20

Distance From Self-Orthopedic

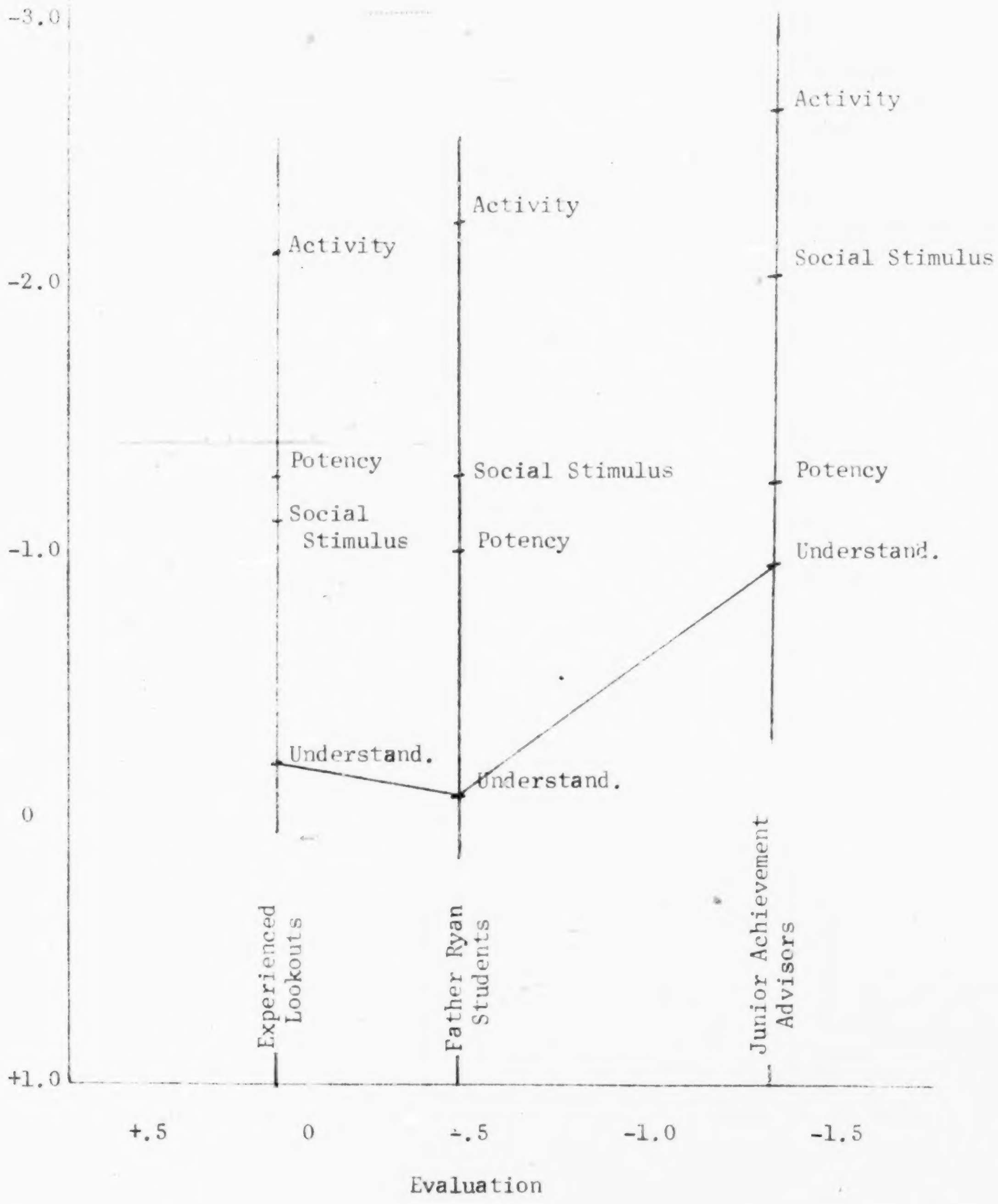


Figure 21

Distance From Self-Cosmetic

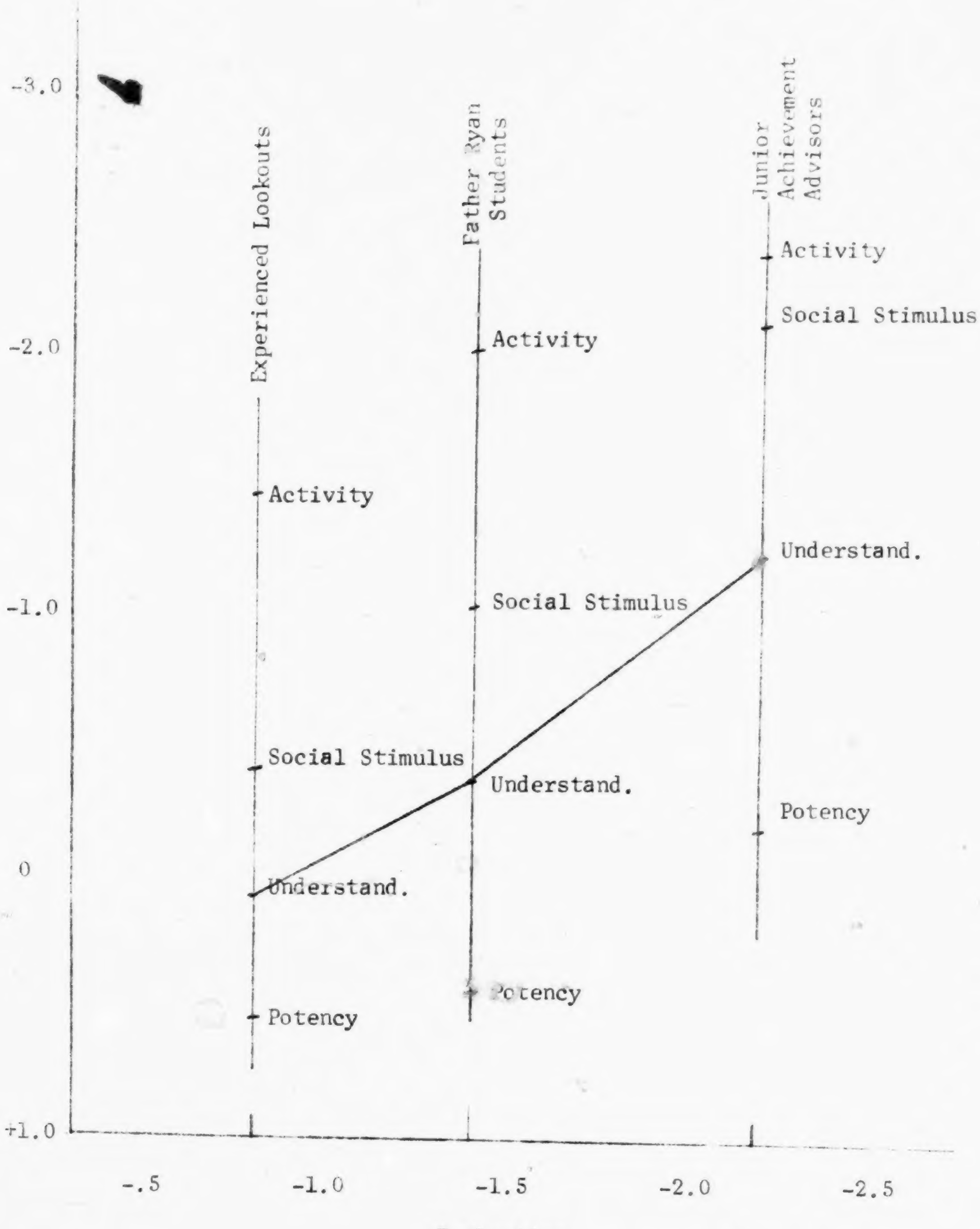
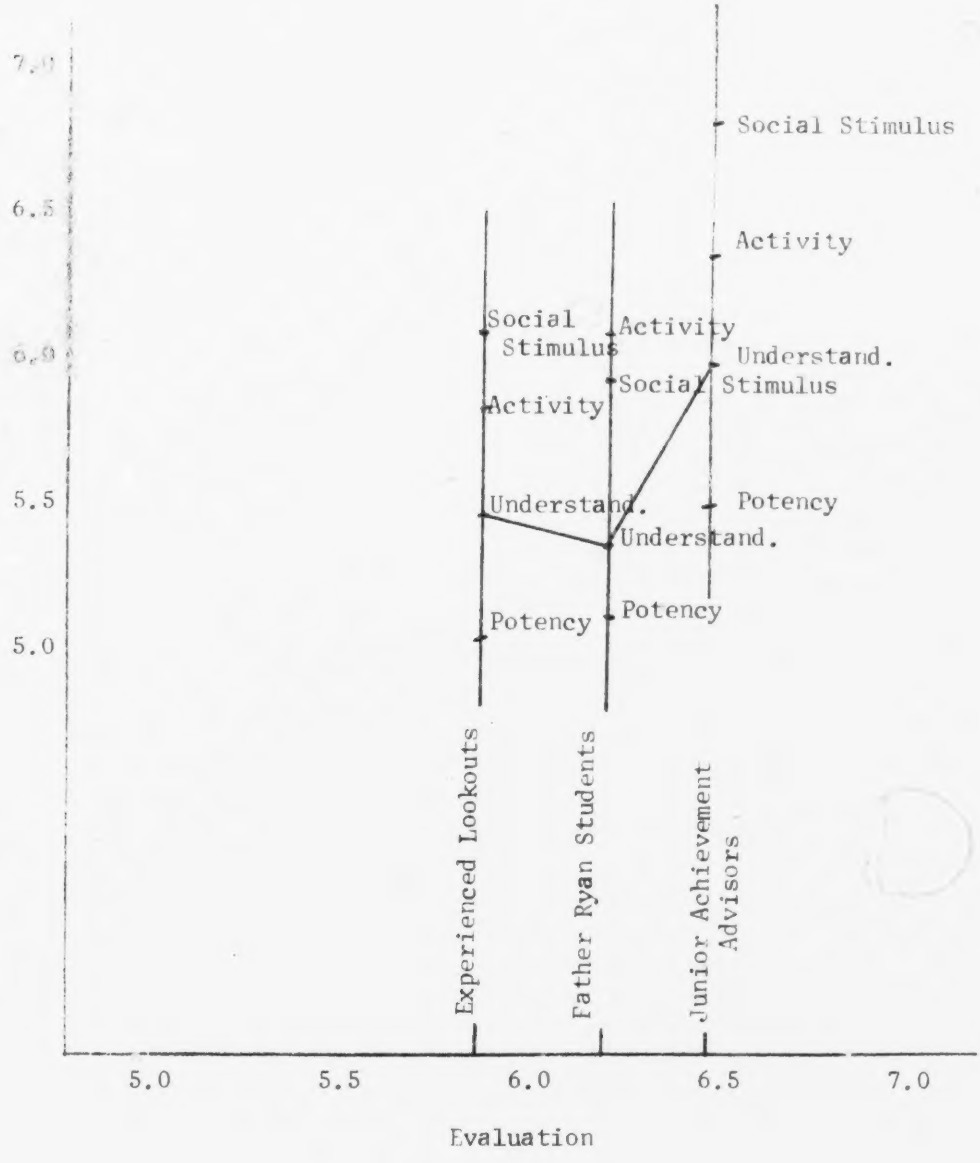


Figure 22

Mean Scale Rating-Self



mean age for the experienced Lookouts was 15.4 years; for the high school students 16.9; for the advisors 34.0. The groups also differed in the amount and kind of contact they had with handicapped persons. The Lookouts are volunteers who have had a great deal of contact with persons with various kinds of disabilities. About 40% of the Father Ryan students had expressed an interest in becoming Lookouts and doing volunteer work with the handicapped, while 60% expressed no such interest. The J.A. advisors, on the other hand, cannot be considered volunteers because they had no part in the decision to place handicapped young people in their companies, although they have in some cases supervised companies which included handicapped persons.

Volunteers

Recruiting High School Volunteers

It has been suggested by ecological psychologists (Barker, 1960) that the best way to remedy the problems of the handicapped is for them to become part of the normal community, thereby diminishing their social isolation. It is felt that if "normal," or non-handicapped, people are brought into a comfortable setting with the handicapped, imitation and modelling would result out of the desire of the handicapped to fit in, with the normals being used as change agents. In an attempt to develop a resource of enthusiastic volunteers to work in such settings, the staff of Father Ryan High School allowed a member of the Outlook Nashville staff to enter their school, giving a series of lectures and discussions, and setting up field work experiences for junior and senior students through religion classes.

It was planned to give enough information to students so that they would be able to work in field situations with handicapped people. The frequent complaint of students that their general academic preparation lacks relevance was taken into consideration, and it was hoped that they would see this experience as relevant field experience. Members of the Outlook Nashville staff entered the school as auxiliary teachers representing an organization whose basic role was dispensing information to and for handicapped people and organizing social clubs where the principal goal was socialization of the handicapped through interaction between the handicapped and non-handicapped.

The motivation of the students varied. Some seemed only to want to get out of their regular classroom work. Others were interested in finding out about themselves through weekly group dynamics discussions and by role-playing their interpersonal problems in the field setting. A few saw the project as a way to learn about social services, special education, or rehabilitation psychology as possible career goals. Some of the students wanted to obtain grade credit for their involvement and were willing to write reports for their instructors if grades were given as reinforcement.

The success of this venture was disappointing and the results less than expected. Weaknesses should be pinpointed so that others may learn from the experience. First, Outlook Nashville lacked the funds to adequately supervise relevant field work experience for the approximately 140 students potentially involved. Field work settings in this case were social clubs within churches that could not bear the massive entrance of students because of their desire to maintain equal numbers of handicapped and non-handicapped persons and to approximate a one-to-one relationship between them. The students, in these numbers, would seriously upset this balance in favor of the non-handicapped. Another problem arose from the locations and meeting times of the TNT Clubs and the lack of transportation to and from those meetings. Father Ryan depended upon Outlook Nashville to provide the settings, but could not offset the financial or situational weaknesses.

Since it was impossible to set up convenient field-work settings for all the participants, apathy soon developed and students began to drop out. The Outlook staff moved more and more towards an academic model of teaching--that is, to teach more and "field-work" less--and the result was a fast declining time-input curve for the involved students. The students were trained in what to do with the handicapped, but lacked the field experience in socialization which would have brought their training into better focus.

Outlook Nashville is only a small connecting service for the handicapped, and is not a backbone of the field teaching process. We feel that in this experiment we have touched a major weakness in the educational process: the lack of relevant field work learning as a motivating force for the young non-handicapped person who could, in more ideal circumstances, contribute significantly to the socialization of the handicapped and to moving them out into the mainstream of community life. An investigation needs to be conducted into possible ways of soliciting financial and supervisory support from other community groups to better implement field work experiences for senior high school students.

Father Ryan Volunteers

Recently, increased attention has been paid to characteristics of individuals who volunteer to work in service programs. Most of the work has been in the context of mental health volunteers. This study attempted to see if the relationships found for mental health volunteers hold for other volunteers, specifically people who volunteer to work with people with disabilities. Since there are many parallels between these kinds of volunteer work (e.g., the people with whom one works are stigmatized and the kinds of work required are similar), it was assumed that volunteer characteristics would be similar.

Generalized expectancy for control of reinforcement (i.e., beliefs regarding the relationship between one's behavior and consequences), whether one's beliefs are generally internal (outcomes are contingent on behavior) or external (outcomes are dependent on fate, chance or luck), seems relevant to taking action. It has been shown that willingness to take part in attempts to change the environment are more likely to be made by those with internal rather than external beliefs (Gore and Rotter, 1963; Strickland, 1965; Lefcourt, 1966). More specifically relevant is Beckman's (1972) study comparing volunteers at a mental hospital with control subjects (college students) who did not have contact with mental patients. Mental health volunteers were significantly more internal as measured by Rotter's Internal-External Locus of Control Scale (1966). However, Hersch, Kulik, and Scheibe (1969), using the same scale, found no difference in I-E scores between Connecticut Service Corps volunteers who spend the summer working with chronic mental patients and a control group of college summer school students.

Attitude toward the population to be served should also affect volunteering. However, Beckman (1972) predicted that volunteers would present more favorable attitudes on the opinions about Mental Illness Scale (OMI), but found a significant difference between volunteers and nonvolunteers on only one subscale. Fischer (1971), however, found that volunteers for a companionship program with mental hospital patients expressed more benign beliefs about mental patients than nonvolunteer college classmates. The correlation between beliefs about patients and volunteering was only .18; however, when the sample was divided into favorable, neutral and unfavorable subgroups, significantly higher correlations between volunteering and other attitudes occurred for the neutral group.

> "Thus, attitudes and beliefs appeared to interact nonlinearly with volunteering. Evidently, beliefs about patients per se had little bearing on the other variables studied...; but perhaps the beliefs scale represented a personality dimension that mediated variations in the attitude-intent relationship (Fischer, 1971, p. 344)."

Of the demographic variables measured (sex, birth order, religion, and social class) only sex was significantly related to volunteering in Fischer's (1971) sample. Women showed a greater inclination to volunteer. Beckman's (1972) nonvolunteers did not come from the identical population as the volunteers, so it is difficult to look at demographic factors. However, the volunteers were primarily (77%) female, while the nonvolunteers were split (56% female). Hersch et al's (1969) volunteers, similarly, were primarily (78%) female while females were slightly in the minority (46%) among nonvolunteers.

Feelings of competence are also relevant in the decision to volunteer. Kazdin and Bryan (1971) found that subjects told they were competent, irrespective of the task relevance of the competence, were more likely to volunteer to donate blood. Self-esteem is a measure of general feelings of competence, so it was expected that people with higher self-esteem would be more likely to volunteer service.

Thus, in this study, measures of demographic data, self-esteem, internal-external locus of control, and attitudes toward people with disabilities were obtained from a population of students from which volunteers were solicited. It was expected that as compared to nonvolunteers, volunteers would (1) have higher self-esteem, (2) be more internal, (3) express more positive attitudes toward people with disabilities, and (4) contain a higher proportion of females.

Method

Subjects. Five classes containing 157 students (119 males and 38 females) at a Catholic high school served as subjects in the study. Sixty-one of these subjects volunteered to work with people with disabilities.

Procedure. Two graduate students went to five high school classes, described Outlook Nashville's program, and requested that students sign up to be Lookouts. Lookouts are given training and then asked to become "friends" of people with disabilities through telephone conversations, home visits, and attendance at social-recreational clubs sponsored by local churches. The methods of presentation of program information differed for different groups.

Several weeks later, one of the same graduate students, accompanied by two other women, returned to the five classrooms and tested the students. The instruments used included: (1) the Rosenberg (1965) self-esteem scale, (2) a second measure of self-esteem in which respondents are asked to indicate how much they like their first name (Boshier, 1968), (3) the Bialer-Cromwell locus of control scale (Bialer, 1961), (4) the Spatial Paralogic Attitude Inventory (SPAI) to measure attitudes toward disabilities, (5) a semantic differential measure of attitudes toward people with disabilities, and (6) demographic information including age, sex, birth order, and social class.

Results

Volunteers were compared to nonvolunteers on the scales and demographic data (see Table 46). The only significant difference was for sex, with more females proportionally among volunteers. The difference in self-esteem, measured by liking for one's first name, approached significance, with nonvolunteers more positive than volunteers. Nonvolunteers were also slightly older than volunteers.

Table 46

Mean Score Comparisons

Variable	Volunteers	Non-Volunteers	t
	(N=61)	(N=93)	
Rosenberg self-esteem	3.15	3.23	-.20
Like Name self-esteem	1.54	1.91	-1.73*
SPAI attitude to HC	22.75	20.20	1.51
Bialer I-E	16.38	16.76	-1.10
Sex (Female=1, Male=0)	.38	.16	3.11**
Age	16.75	16.99	-1.79*
Socioeconomic Status	62.57	58.69	1.11
Number of Children in Family	4.79	5.19	-.98
Birth Order	1.89	1.85	1.33

*$p < .1$, df=152
**$p < .01$, df=152

The relation of volunteering and attitudes expressed on the semantic differential was investigated using an analysis of variance of the type subject (volunteer) X scale X category for mean scale ratings (see Table 47). There were three groups comprising the variable volunteering--those who signed up to volunteer, those who showed up at a training course, and all other students. There were significant main effects for scale and category. Evaluation (4.96) was rated higher than the other four dimensions--activity (4.49), potency (4.68), understandability (4.52) and social stimulus value (4.58)--which didn't differ from each other (LSD_{143}=.27). Most People I Know (6.08) and the Self (5.69) were rated

Table 47

Analysis of Variance

Mean Scale Ratings

Source	df	MS	F
Volunteering (A)	2	16.19	1.56
S(A)	140	10.39	
Category (B)	9	152.79	34.47**
AB	18	1.73	.39
S(B)	1260	4.43	
Scale (C)	4	19.27	10.03*
AC	8	.64	.33
S(A)C	560	1.92	
BC	36	14.52	14.02**
ABC	72	.83	.80
S(A)BC	5040	1.04	

Note.--The df=1,140 for all comparisons since the Gaiser-Greenhouse correction for repeated measures analyses of variance was used.

*$p < .01$
**$p < .001$

significantly higher (LSD_{143}=.42) than the other categories. Juvenile offenders (3.84) were rated lowest although they didn't differ significantly from habitual criminals (3.87), mobility disorders (3.91) or Person With Whom I'm Uncomfortable (4.09). The other disabilities were rated as intermediate--orthopedic (4.69), cosmetic (4.84), sensory (4.79), and communication (4.64). There was also a significant scale X category interaction. The means are presented in Table 48. The Self and Most People I Know are rated high on all scales. Habitual criminal and juvenile offender are consistently rated low except on activity.

Following Fischer (1971), students were divided into those displaying positive, neutral, and negative attitudes toward people with disabilities on the SPAI. Correlations between volunteering and the other measures were computed for each subgroup.[12] The only significant correlation was between sex and volunteering for those with positive attitudes (r=.32). The comparable correlations were lower and not significant for those with neutral (r=.22) and negative (r=.13) attitudes.

Discussion

Once again, no relation was found between internal-external locus of control and volunteering. A different measure was used, which may

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[12] Only those subjects who completed all questionnaires, including the semantic differential, were included in this analysis.

Table 48

Mean Scale Ratings

Scale X Category

Category	Activity	Evaluation	Potency	Understandability	Social Stimulus Value
Mobility	3.42_{a}	4.16_{fg}	3.85_{bcd}	4.02_{def}	4.13_{efg}
Orthopedic	3.80_{bc}	5.69_{uv}	4.12_{efg}	5.20_{qr}	4.62_{jkl}
Cosmetic	3.99_{cdef}	4.79_{klmno}	5.56_{tu}	4.97_{op}	4.88_{mno}
Sensory	3.95_{cde}	5.85_{v}	4.60_{jk}	4.81_{lmno}	4.73_{jklm}
Communication	4.36_{hi}	5.33_{rs}	4.58_{j}	4.28_{ghi}	4.67_{jkl}
Juvenile Offender	4.29_{ghi}	3.75_{b}	4.18_{fgh}	3.45_{a}	3.51_{a}
Most People I Know	6.20_{wx}	6.55_{y}	5.46_{st}	6.34_{x}	5.86_{v}
Habitual Criminal	4.76_{jklmn}	3.39_{a}	4.38_{i}	3.38_{a}	3.46_{a}
Person With Whom I'm Uncomfortable	4.08_{ef}	3.95_{c}	4.94_{nop}	3.39_{a}	4.07_{ef}
Self	6.02_{vw}	6.14_{w}	5.10_{pq}	5.36_{rs}	5.85_{v}

Note.--Means with a subscript in common do not differ significantly.

$p < .05$ ($LSD_{143} = .2$).

explain the discrepancy between this and Beckman's (1972) results; however, Hersch et al. (1969) did use the same scale as Beckman and likewise found no difference. Further work needs to be done to determine the kind of activities in which internal locus of control increases the probability of participation.

Volunteers expressed slightly more positive attitudes toward people with disabilities than nonvolunteers, but the difference was not significant. No differences in attitude between volunteers and nonvolunteers were expressed on the semantic differential. Likewise, volunteers did not express higher self-esteem on either measure. There was a trend toward higher esteem from nonvolunteers only on the "like name." Thus, some factors other than self-esteem, attitude, or expectancy regarding control are related to who helps.

As in previous research, females were more likely to volunteer.

It seems that a simple description of who helps in terms of a personality type or general attitudes are not forthcoming. Further in depth work along the lines carried out by Rosenhan (1970) in interviewing civil rights workers may prove more fruitful in studying volunteers.

The Training of Volunteers In Techniques of Behavior Modification

Training courses that prepare volunteers for social contact with persons having a wide range of handicapping mental and/or physical conditions emphasize the desirability of horizontal relationships between volunteers and handicapped persons. The new volunteers, however, are destined to become highly "significant others" to their handicapped friends. Everything they say, do, or think will become a model that handicapped persons around them will strive to emulate. This project was undertaken to determine whether appropriate training could prepare volunteers to deal efficiently, effectively, and constructively with the astounding amount of power these "horizontal" relationships force upon them.

Handicapped persons often display a great deal of dependence on volunteers who become their friends. This dependence is most clearly emotional in nature, but there is also a physical dependence present in many situations (e.g., with quadriplegics). The existence of this dependence means, in the terminology of reinforcement theory, that volunteers become strong reinforcing agents. They possess powerful rewards, and they can determine the schedule of delivery of those rewards. Volunteers with a strong working knowledge of behavior modification would be well prepared not only to cope with the sometimes overwhelming dependency demands of handicapped persons but also to use this aspect of the relationship constructively. Volunteers who patronize handicapped persons perpetuate their dependency needs; volunteers who selectively reward handicapped persons for independent, self-sufficient, and mature behaviors can rapidly dissolve those needs and minimize their feelings of worthlessness.

In addition to the handicapped youngsters and adults already participating in Outlook activities, it was felt that selected younger clients (ages 16-21) of Tennessee's Division of Vocational Rehabilitation (DVR) could benefit substantially from such increasing self-sufficiency and its concomitant rise of self-esteem. Client "motivation" has long been a problem for vocational rehabilitation professionals, but records of the use of behavior modification with such cases has been excellent (cf., Goodkin, 1966; Meyerson, Kerr, and Michael, 1967); other clients lack adequate social and/or behavioral skills even to remain in VR training programs. When we consider (a) the manpower shortage presently being felt in virtually every helping profession and (b) that there *is* no profession established to socialize those persons who need such services, we have more than enough compelling reasons to look seriously for ways to train and utilize volunteer manpower. Previous investigators had reported the use of volunteer college students in programs of applied behavior modification (Davison, 1965; Meyerson, Kerr, Michael, 1967; Tharp and Wetzel, 1969). This project therefore sought to demonstrate that a volunteer agency could recruit, train, and coordinate a sufficient cadre of volunteers to deliver certain rehabilitative services to VR clients.

The pilot phase of the project began in November, 1970, with a training course in the principles of behavior modification for the nine Vanderbilt undergraduates who had volunteered. A training manual for hospital attendants working on token economy psychiatric wards (Heap, 1970) was adapted to apply to VR clients, and the revised manual became the text for each training cycle. The training sessions were conducted by the principal investigator, a graduate clinical psychology student and a consultant experienced with behavior modification.

As training proceeded, efforts were continued to secure sufficient client referrals from DVR. Some years previously DVR had referred several clients to Outlook for training in routine office skills. Since they were dissatisfied at that time with the unstructured, conversational way in which the training was handled, a key DVR official was reluctant to allow counselors to refer clients to Outlook. This severely hampered the progress of the pilot phase of the project and eventually resulted in the termination of the entire project, although several other DVR personnel showed enthusiasm for it. By the time five clients had been referred to Outlook, the fall semester had ended and several volunteers had dropped out of the program because of boredom. This attrition created problems with the collection of post-training data from volunteers.

A second training cycle was begun in February, 1971, in which nine new volunteers joined the five already-trained volunteers who had been willing to wait for client referrals. Active client contact began in March, 1971, and 77 hours of direct volunteer-client interaction were logged during the months of March, April, and May. Logistical problems and the volunteers' lack of practice in the application of what they had learned prevented the collection of reliable data on each client's progress, despite the fact that suitable instruments had been devised by that time for administration to the clients' parents. The referring counselor was highly pleased with the progress volunteers had made with her clients, and her successor continued to support the project actively.

The summer months were devoted to an evaluation of the pilot project and preparations for the next school year. These conclusions were drawn:

1. Effective training could be accomplished in one month or less, although the first cycle had spanned a period of more than three months.
2. Each cycle would have to begin promptly at the start of a semester in order for there to be enough time to collect viable data from both volunteers and clients.
3. It was essential that a formal agreement exist between DVR and Outlook Nashville to facilitate a steady flow of client referrals.

A thesis was written (Wintker, 1971) to provide theoretical underpinnings for the project including an historical review of vocational rehabilitation in America and a critical analysis of the way in which Tennessee's DVR was at that time implementing important passages of recent federal legislation. A service-delivery system provided by Outlook Nashville to DVR was proposed.

A third training cycle began shortly after the opening of Vanderbilt's fall semester. Eight new volunteers joined a nucleus of five others that had returned from the spring semester. One of the new volunteers was a graduate student who was obtaining field experience required by the Vanderbilt Divinity School. During the one-month training session a formal proposal was submitted to the Tennessee DVR. At the same time, one counselor did his best to line up referrals even before any official agreement existed. Despite his considerable efforts, however, only one viable client became involved with the project. When no formal action was taken on the Outlook proposal, and word was received from Washington that the grant supporting the project was not to be renewed for its third and final year, the project was terminated at the end of 1971.

In the course of one calendar year, three training cycles had trained 25 volunteers in the principles and procedures of behavior modification. Well over 120 hours of direct volunteer-client interaction had been logged. In addition to this, one Master's thesis and five undergraduate honors papers have been written and a graduate student gained practicum experience. The project certainly did not fail because volunteer workers are unable to deliver meaningful services to handicapped persons. It is believed that the enthusiasm with which volunteers continued to enter the project and with which DVR counselors and supervisors heralded the project as a much-needed service-delivery system was fatally dampened by official forces beyond the control of the project's administrators.

Peabody Students

Under the supervision of Martha Carroll, a graduate student in special education working on the research staff, fourteen undergraduate students in special education at George Peabody College for Teachers spent the fall semester working in pairs with individuals who were disabled and approximately the same number worked in a similar manner in the fall of 1970. The group was given an orientation course by the Training Director primarily to acquaint them with Outlook Nashville.

Since these were special education students, the training dealing with attitudes toward the handicapped and physical handling of people with disabilities (wheelchairs, etc.) was omitted.

Testing of these students before and after participation in the program is reported in the section on testing of volunteers.

The purpose of the program was to help socialize the disabled people with whom students worked. They expanded the environment of the disabled by taking them places (e.g., to concerts, the dorm, out to eat) and thus, gave them an opportunity to interact in a variety of settings, which they might not otherwise have. By providing an example of "appropriate behavior," the students provide models for the handicapped. In addition, socialization was accomplished through behavior modification techniques. The students involved in the program wrote weekly reports of activities and progress of the disabled.

Research on this program was to have included outcome measures on the disabled involved. The plan was to develop and pretest measures this year for use in a controlled study of next year's program. The termination of the grant made this unfeasible, so adequate research is not available on this program.

Informal evidence suggests that students and disabled gained from the program. Providing course credit for volunteer work helps establish incentive and thus, volunteers in this situation provide ongoing contact with disabled. It is difficult to get volunteers to give this much time without tangible incentive. Record keeping is a major problem with volunteers, and again, credit provides the needed incentive so that records are kept. The description of the experience with volunteers at Father Ryan High School provides a contrasting situation where no credit was available and results were quite different.

There is a problem with using student volunteers on a semester basis. What happens to the disabled when the semester is over and they are no longer around? No evidence is available on this question.

A great deal of the success of this effort is due to the supervision provided by Martha Carroll. To continue a program like this, close supervision is necessary. Volunteer family consultants might be able to provide such supervision, but they would have to be willing to put in the time and be available to the students. At present, Outlook Nashville does not have such family consultant volunteers available. They must be recruited if this program or others like it are to be viable. There is a possibility that some students from a Vanderbilt undergraduate personality course will be available as practicum students next year. If adequate supervision is available, they could work in a manner similar to the special education students discussed here.

There was a weekly meeting of the Peabody students with the supervisor. The meeting provided the opportunity for the students to discuss problems, frustrations and accomplishments in relation to their work with the handicapped person. The students provided alternatives and support for other students. Meetings were not required and the attendance varied from 46% to 100% with the mean close to 83%. In addition, other students and faculty members attended these meetings.

Assessment of Volunteer Recruiting and Training

Interview Data

Of about 1200 persons who had taken the orientation course between 1960 and 1970, 450 had been involved with Outlook Nashville programs enough to remain on the mailing list. A sample of approximately 140 were contacted and interviewed in an attempt to evaluate their helping experiences, the effectiveness of the Lookout orientation courses, and the success of the Outlook Nashville office's use of available volunteers. About twenty of these had taken the orientation course so recently that they had not had time to gain experience as volunteers. A few interviews yielded so little useful information that their data were not included in this report.

The Volunteer Population

Of the 117 interviews included in this summary, 100 were with females, and 17 with males. Forty volunteers were married and 77 were either still single or widowed. The ages ranged from 11 years to over 60, with 67% falling in the range from 11 to 29 years of age. Over fifty percent were still in school, most of them in junior or senior high school. About one-fourth were housewives, about 10% were employed full-time, and the remainder were either retired or working only part-time.

Program Entry

Most of the volunteers had learned about Outlook Nashville through their church or school, another civic organization, Outlook Nashville publicity, or from friends or family. Thirty-six percent had taken the orientation course during 1969, 1970, or 1971, another thirty-six percent in 1966, 1967, or 1968, and twenty-one percent had taken it earlier than that. Eight had never taken the course although they were or had been involved in volunteer work.

Sixty-two stated that they were now available for volunteer work in some amounts and under some conditions; 63 reported that they were currently doing volunteer work either for Outlook Nashville or for some other agency; 63 have volunteered in the past, but for various reasons were not currently volunteering. Twenty-four had never done volunteer work, half of these explaining that they were never given the opportunity to do so, the other half stating that although they were given the opportunity, they chose not to do so.

The most frequent types of volunteer work done were involvement in one of the TNT Clubs as sponsors or Lookouts, counseling and visiting with the handicapped or their families, work in the summer Parks Programs, arts and crafts instruction, telephone-TV pals, office work at Outlook Nashville, babysitting, and providing transportation to various programs.

When asked about the types of handicaps they worked with, several listed specifically the mentally retarded, the physically crippled, the deaf, the blind, the aged, and the emotionally disturbed. Most, however, had worked with people with several different types of disabilities. Slightly more than half had involved others (a family member, friend, or other Lookout) in the helping activity, as Outlook Nashville recommends, especially on the first few visits or activities.

Two of those interviewed were themselves handicapped in some way, and 21 had family members who were handicapped.

Several questions were asked to specifically evaluate the orientation courses. Two people could not remember the course well enough to evaluate it; two felt that the course had not helped them in their work; 92 felt that they were aided in their volunteer work by the information given in the course. Thirty-two felt that they needed more information than they had gotten from the orientation course, or offered criticisms or comments on ways to improve the course. Some specific suggestions were as follows:

1. More specific information was needed about the different kinds of handicapping conditions.
2. More specific information was desired on the backgrounds of the people they were working with. (It has been Outlook Nashville's policy in most cases not to label or diagnose the handicapped person, since the focus is on the personal and social growth and development and not on the handicap itself.)
3. Help is needed on how to handle disturbed children and discipline problems. (The Behavior Management program mentioned elsewhere is directed in part at this sort of problem.)
4. Some opportunity is needed for new Lookouts to gain experience with the handicapped before they go out on their own. (In this respect, Outlook Nashville recommends that a new Lookout team up with an experienced Lookout on his first few contacts.)
5. Smaller numbers of trainees in the courses would be desirable.
6. More time should be allowed for training.
7. Some information is needed on how to work with groups.

Training of Volunteers

The recruitment, training and coordination of volunteers in a service program is a complex and time-consuming task. To make this fact clear, some of the conditions necessary for the development and maintenance of an effective volunteer program, as our experience of more than ten years has taught us, are outlined below.

1. Volunteers are free. They may work or not work as they choose. Hence, their assistance in a volunteer service program depends upon the gratifications available to them as a result of that work.
2. It follows that if volunteers are recruited and trained, they must be given active participation immediately, otherwise they become frustrated and withdraw, feeling that their time has been wasted.
3. Work settings must be provided immediately for volunteers and effective consultation and support with regard to task demands must be available to them, otherwise they find the experience frustrating and drop out.
4. Not all volunteers like all forms of volunteer work. Some prefer one thing, some another. The match between a volunteer and a work setting is not an easy thing to achieve, and in the process many volunteers withdraw and are lost.
5. As a general consequence to all of this, the attrition rate in the recruitment and utilization of community volunteers is very high.

Outlook has trained in the past fifteen years more than 1200 volunteers, if by training we mean the recruiting of a volunteer for an orientation course which opens for him the opportunities of volunteer assignment in community services. Of the 1200 volunteers certified which Outlook has trained and whose names appear on our rolls as persons who have taken training courses, not more than ten percent are presently actively participating in Outlook programs. Another ten to twenty percent participate occasionally depending on the task, the opportunity, and interest. Certain considerations follow from this: (a) It is inadvisable to give extensive training courses prior to the assignment of the volunteer to the work setting since the attrition rate is so high that the amount of training effort wasted would be very, very substantial. (b) The building of an active and effective volunteer program takes time. Not only is there substantial attrition early in the recruiting and training process, there are also factors which further reduce the availability of volunteers trained at the time, among them such factors as interest, changes of life circumstances, as in the case of high school students who grow up, practical considerations such as removal of the volunteer from the community, etc. To build a cadre of twenty volunteers would then require that in the vicinity of 150 to 200 volunteers would need to be sifted through the recruiting, training, assignment, and counseling process in order to find those who would find the work satisfactory and rewarding and who would be willing to devote regular time to program activities.

Recruitment

Volunteers should never be recruited unless there is a "specific" job for them.

Recruitment should begin in areas around the TNT Clubs to provide a tangible "service" area. With the TNT Club as the job, Outlook should attempt, initially, to expand services around this area of established service rather than attempting, in the beginning, a total program of recruiting, training and implementing a cadre of well trained, informed, active volunteers in all areas of the city. This means that an all out effort would be made to recruit from the churches which sponsor TNT Clubs people who are willing and competent to function as community consultants. They can be supplemented from Volunteer Placement Service referrals and from organizations such as Junior League but they must work with the TNT Club sponsors and the sponsoring churches in the beginning.

The Role of the Community Consultant

The Community Consultant must be a person who knows the community and has connections from which to draw enthusiastic "friends" for Outlook. He/she is equipped with job descriptions of services her "friends" can perform and she is backed up by the Outlook staff and Board with a "Recognition" Program for volunteers.

All volunteers should be given specific jobs immediately upon completion of the Basic Orientation Course and small group course for that particular service group. They are then assigned to a supervisor from the office or community. Their supervisor follows up on the first service experience and periodically later. The Outlook staff and Board should place great emphasis on the Community Consultant and honor her/him with invitations to Board meetings for reports and recognition. He/she should receive notice in the newspapers and other media as do Board members, and the Community Consultant should be involved in staff meetings on a regular basis.

Training Courses

> "The Lookout Training Course is designed to help non-professional persons feel more comfortable around persons in their community who are physically, mentally, and emotionally different. This is an attitudinal course and is essential for all Lookout acitivities (Ellis and Page, 1967, Preface)."

Traditionally Lookout training courses are offered in conjunction with one of the Outlook Nashville service programs, i.e. TNT Clubs, Summer Park Program, etc. Since the particulars of each type of program differ widely, training courses for each type of program have differed slightly. It may be more efficient, however, to gear the courses for more general application, with the result that more people can be trained with fewer separate courses.

Theoretically, the Lookout training courses are to be held in two sessions: (1) one 3-hour session of general introduction to Outlook Nashville and, more specifically, to handicapped persons and their needs, and (2) a "rap" session after the new Lookouts taking the course have "gotten their feet wet" with participation in a TNT Club or other Outlook volunteer activities to discuss problems the new Lookout has faced. Outlook Nashville has had to remain flexible in this procedure, however, as it has been difficult to coordinate volunteers.

A typical orientation course might be scheduled as follows:

1. General introduction to the programs and purposes of Outlook Nashville.
2. A panel of Lookouts (both handicapped and non-handicapped) to discuss the initial reactions of the non-handicapped Lookout's first encounter with the handicapped or the handicapped person's first encounter with a Lookout.
3. Demonstration of equipment (predominantly the wheelchair) used by those who are disabled. This is followed by first-hand experience and the group is broken up into smaller groups to see what it is like to be blind, or sit and ride in a wheelchair. In one setting, a few members of the group took two wheelchairs around the shopping center upstairs from the meeting room. This proved to be one of the most powerful experiences of the whole session as they could sense and see people moving away from them. Research has shown this type role-playing to be a highly successful technique (Clore and Jeffery, 1972).
4. A behavior modification film[13] followed by a discussion relating it to the groups' future encounters (i.e. TNT Clubs setting, etc.).

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[13] "Rewards and Reinforcement in Learning." Arizona State University, Dr. Lee Meyerson, Dr. Nancy Kerr and Dr. Irving Lazar, 1968.

5. Situations where possible circumstances are described and each person is asked what they would do in that particular situation. An example would be: A 19 year old girl is acting in an objectionable manner. She punches you, screams and yells. You want her to be quiet and attentive.

6. Role-playing of a small group interaction with a handicapped person entering the room and causing a slight disturbance.

7. Summary of session and introduction to possible programs where new Lookouts are needed.

In the case where specialized or advanced service training is needed, these sessions could be scheduled to follow the basic orientation course. For example, training for the Park Program should include first aid training, swim training, training in removing and replacing braces, etc. For TNT Clubs, volunteers should be instructed in the problems typical of those settings, such as clinging behavior, excessive demands by the handicapped of the Lookout, etc. as discussed in the TNT Guidebook.

Use of Volunteers

Some of the problems in the agency's use of trained volunteers are discussed below:

1. There was no immediate follow-up with job assignments for recent training course graduates. If volunteers are not given instant direction they tend to lose interest. One suggestion is to match up an experienced Lookout with a new Lookout. The old Lookout would be responsible for getting the new Lookout involved with a handicapped person (visiting a homebound student, attending a TNT Club, etc.). That way the new Lookouts will feel confident of carrying on by themselves.

Newly recruited volunteers should be prepared for the job not only with the basic orientation course but with individualized courses offered to small groups by the Program Coordinator and/or Board Members volunteering for the job. This not only gives them security in knowing "how to" and "what to" do but reassures them that they are performing a job that a "professional" might otherwise be performing. A volunteer, after receiving the basic orientation course, checks off on a form given him at the course a volunteer service he would like to perform (transportation, home visitation, etc.). He is then invited to a small group orientation for that particular service category and given more particulars on what that job entails. Upon completion of this adjunct course, he is then given an assignment to the Administrative Assistant if his job choice is transportation or to the Community Consultant in his neighborhood or area of town if his job choice is home visitation. If he chooses to become a TNT Club Lookout his assignment is the sponsor of the club to which he will be going. Particularly there is a need to make appealing to the recent orientation course graduate the work of the "home visitation" volunteer. This seems to lack appeal to most volunteers and the office receives more calls for this service than anything else other than transportation. To do this, the agency needs to present the volunteer with a "kit" of tools. He needs before he makes a home visit: information on the person he is visiting from the office-a review of whatever written intake information the office has; magazines and other visual aid materials that are fitting for the client he is visiting; and games and other recreational devices that might help break the ice on the initial visit. The Community Consultant must call him after the visit to talk about what transpired offering him a chance, to ventilate his anxieties, doubts and to receive reassurance.

2. There was no "built-in" plan for recognition and promotion of volunteers. There must be a challenge to being a volunteer. While all volunteers perform a service, not all perform equally and this inequality of effort must be reflected in a recognition program. Yet, all volunteers should be recognized. The following program has been proposed to recognize volunteers according to their expenditure of labor and dedication: (a) Each training course graduate receives a certificate presented by the Executive Director or President of the Board. (b) All orientation course graduates who complete an advanced service course and begin performing as a volunteer in that service category should receive a service award at the annual dinner. (c) The Junior Lookout who has achieved a standard of devoted and consistent service should be given an award. (d) The handicapped person who has made the greatest strides toward overcoming his disability and has, in turn, helped his handicapped brother, should also be given an award. (e) Recipients of the established awards given at the annual dinner should be chosen with infinite care so that the honor is more meaningful. The Five Year Pin should exemplify service more than longevity. It is not enough to reward a few people once a year. Outlook should recognize its volunteers at strategic times during the year.

3. Volunteers were utilized mainly (with the exception of TNT Club Lookouts) on a "one shot" basis and not given jobs requiring continuous dedication to and work for the agency and, subsequently, were lost to the agency. New volunteers were continuously being sought, used once or twice and lost (usually to other agencies). A system of adequate follow-up with new Lookouts should be developed to find out exactly what they are doing, if anything, and discuss the problems they've encountered. They need occasional encouragement for their effort and concern and this should be dealt with. If the volunteer's initial experience is rewarding, he will be willing to further his experience; if it is for some reason unpleasant, consultation with the club sponsor or Community Consultant may help to correct the problem and encourage him to continue working. At any rate, the office will not know about the Lookout's experience unless a system of follow-up is put into effect with each volunteer.

Behavior of the Disabled

TNT Club Data

In an earlier section the structure and function of Outlook Nashville's TNT Clubs were described. Their basic purpose is to provide an environment for social interaction between people with disabilities and "normals." This contact is frequently not otherwise available. Dinger (1958) found that educable mental retardates as a whole participated in virtually no civic or social affairs; by contrast, he found that employed mental retardates with comparable intellectual abilities were much closer to normals in this regard. Thus, especially for the disabled who are not employed or in school, social isolation is a major problem.

Lack of social contact is related in a circular fashion to lack of social skills. Disabilities such as mental retardation, orthopedic problems, and blindness carry with them stigma (Goffman, 1963). "For some physically disabled persons stigma is their most salient or basic fact of life. In many instances stigma appears to be a basis of further limiting medically impaired persons by turning physical disabilities into vocational, personal, and social handicaps (English, 1971, p. 1)." In other words, the disabled are repugnant in society's eyes and they are devalued and isolated. This negative emotional barrier in addition to decreasing opportunities for contact, makes any contact more negative. Thus, it becomes more difficult for the disabled to develop social skills and lack of such skills makes the contact increasingly negative, a continuing circle. Farina, Allen and Saul (1968) found that when college student subjects interacted with a partner, whom they were told incorrectly perceived them as mentally ill or homosexual, the subjects performed more poorly on a task, spoke less, and initiated less conversation than control subjects who were told their partners perceived them as normal college students. Farina, Gliha, Boudreau, Allen and Sherman (1971) found similar but nonsignificant trends in two studies that used current and former mental patients as subjects, with half of the subjects told that their partner knew their history. Thus, knowledge of stigma makes interaction more difficult for the disabled, independent of the other person's actions in a situation.

The purpose of TNT Clubs is to decrease social isolation and provice a setting where a minimum of stigma inhibits interaction between disabled and normals so that the disabled can practice and improve social skills. Measuring how successfully these purposes are carried out is a difficult problem, because good dependent measures operationalizing these goals are not available. The study to be described is an attempt to develop such measures using observational techniques, ratings, and self-report data. Based on a year's experimentation, measures were to be developed for use in the final grant year. The termination of the grant forced us to use the measures of the exploratory stage as assessment data on effectiveness.

Two previous research programs were located dealing with directly relevant problems. Both investigated means of integrating handicapped and non-handicapped in social and recreational settings--one working with the retarded and the other with physically handicapped individuals.

Goodman and Goldbaum (1965) describe a program for integrating educable mentally retarded (EMR) children into social programs sponsored by Jewish Community Centers. Raters, using records and interview reports judged that most (75%) of the 41 initial participants in this project had done well (Pumphrey, Goodman, Kidd, and Peters, 1970). All participants were retarded, but a large number of these 6-19 year olds had a physical handicap as well. Group leaders' ratings of participants showed significant differences between EMRs and controls with EMRs participating less, contributing less to the group, and adapting less easily to new situations. However, later teacher ratings comparing EMRs who had participated in this program to comparable classmates showed program participants to be superior on effort, perseverance, and adaptability, although slightly (but not significantly) lower on sociability. Additional data was gathered, using questionnaires to group leaders and observations on 70 EMRs participating in these groups (Pumphrey, Peters, Flax, and Goodman, 1970). EMRs tended to improve significantly in belongingness and comfort. Observers rated EMRs as being as involved as the normal children. Although the data is not sophisticated, it does provide tentative evidence for positive program effects. "In spite of their obvious social limitations, compared to normal children, most of the EMRs, according to their own and their parents' reports found the experience a positive one, far out-weighing the isolation they had often experienced (Pumphrey, Peters, Flax, and Goodman, 1970, P. 14)."

A more detailed study of a similar program was reported by Holmes (1966). Structured observations provided the control data on interactions. The handicapped children appeared to withdraw less often and expressed realistic self-esteem more often at the end of the program than at the beginning. Although normals showed increased interaction later in the program no change was found among handicapped. The author reports in summary that in general, "these data support various impressionistic material...that the program did have a significant and meaningful effect upon its participants (Holmes, 1966, p. 56)." Although high reliability (mean of .70) was reported by Holmes, his coding system appeared to us to be unwieldy and imprecise. Thus, a more simplified observational code was developed for this study, although some of Holmes' techniques and hypotheses formed a basis for its construction. Holmes also reports on a follow-up questionnaire. Here, the parents expressed positive feelings about the program and general impressions which paralleled those of the staff regarding the degree and source of benefit of the program. Similar data were gathered in the study to be discussed.

Thus, these studies provided some basis for measuring program success. Asking parents and program leaders to evaluate the program and participants provides measures which could be used, but additional behavioral measures were desired. We determined that interaction was one important purpose of the club. Thus, we hypothesized that increased interaction should occur later in the club year, and this would be considered a measure of success. We expected this to be more true for new members than for old members. In addition, peer interaction should increase and interaction with the sponsor decrease. Using observational data, these hypotheses were tested. In addition, descriptions of amount and kind of interaction are available from the data. Holmes (1966) distinguished between structured and unstructured activity and found different interactions occurring. He suggested that more social maturity was necessary for unstructured activity and that after a while, structured activity provides little benefit. Since both structured and unstructured activity occur in TNT Clubs, observations were taken in both periods for contrast purposes.

Method

Overview. Observations were made at monthly meetings of six TNT Clubs from December to May. Attempts were made to obtain 15 minutes of data from structured activity, unstructured activity, and the business meeting for a total of 45 minutes of observation of each handicapped participant. In addition, sponsors completed background forms on each participant and rated each participant following each meeting. Questionnaires were sent to the families of each participant on whom observational data was available to obtain their reactions to the program as well as additional background data.

Subjects. Handicapped participants in TNT Clubs served as subjects. Each observer collected data on one participant, so data was collected on as many participants as there were available observers. There is at least one observation available on 64 participants, and the maximum number of observations of one participant is 5. The characteristics of the subjects are presented in the results section.

Observation Code. A survey of existing observation codes was made but no suitable code was located, so a simple code was constructed. Seven types of behavior were coded: (1) Talking (T), (2) Listening (X), (3) Laughing (S), (4) Crying (C), (5) Physical Helping (PH)-being helped, (6) Physical Helping by the Handicapped Person ((PH)), and (7) Physical Touching (PT). Most of these are self explanatory. PH was only used for actual physical help, like pushing a wheelchair, *not* for teaching, such as arts and crafts instruction. Helping someone eat was coded PT, not PH. Appendix C contains detailed observation instructions, codes, and coding sheets. It was determined that coding listening was very difficult and unreliable, so this was dropped in March. For some analyses, listening has been included when it was coded, while it is omitted in others. Initially, listening was only coded during business meetings and unstructured activity. In February, listening was added to structured time as well.

With each behavior except S and C, the type of person with whom it occurs is coded. Three types of people were coded: (1) Adult (A)-generally a club sponsor, (2) Lookout (L)-normal peers who participate in club activities, and (3) Handicapped (H), and the sex of the person was coded as well. If the interaction was with the whole group, it was coded G, and a subgroup was coded g, with the type of persons making up the subgroup noted.

Continuous coding was done and entered on one minute lines which are subdivided into fifteen second intervals. Every five minutes, a written description of the activity was recorded. If a single behavior lasted longer that 5 seconds, a continuous line was used for recording, and the behavior was only counted once per minute in our tally.

Observers. Twelve female college students were trained to use our observation code. Other groups were observed for coding practice, and a video tape was coded several times to improve reliability. Observers coded different participants at each month's meeting.

Procedure. Observers at each monthly meeting were assigned a handicapped participant. They were to attempt to code 15 minutes of each of three types of activity: structured, unstructured, and business. These were not necessarily consecutive; for example, five minutes of unstructured activity might be followed by a 15 minute business meeting, and then a return to unstructured activity. Where less than 15 minutes were coded, data were converted to the equivalent of 15 minutes by multiplying by the appropriate fraction (e.g., 8 minutes of data would be multiplied by 15/8).

In addition, at each session observers were paired and collected 5 minutes of data on the same individual to calculate reliability. Pairings were changed at each session so that reliabilities were calculated for a variety of pairs.

Club sponsors were asked to fill out background forms on each TNT handicapped member, as well as rating forms following each session (see Appendix D for the forms). Not all sponsors complied, so a great deal of data is missing from these. On these forms sponsors were asked to assess progress the member had made since joining the club, as well as rating bipolar characteristics such as dependent-independent, nonverbal-verbal, etc. Data is only reported for participants on whom observations are available.

Finally, questionnaires (see Appendix E) were sent to families of handicapped participants (or the members themselves when they were capable) on whom observation data was available. In addition to gaining background information, these questionnaires asked about the contributions of the club to the member.

Results and Discussion

TNT club description. The six TNT Clubs observed have approximately 80 handicapped members. Table 49 shows the distribution of members by club and the actual members we observed. All further data will refer only to the proportion of the club members whom we observed. This should reflect the actual compositions of the clubs to a great extent, since most of the members were observed except at two of the larger clubs--A and E.

The distribution of sexes of those observed is shown in Table 50, and ages are shown in Table 51. Clubs D and F have a preponderance of females, while club E is predominantly male. Club C has the youngest membership. Clubs B, D, and F have young adult members, primarily in their late teens and early twenties. Clubs E and A have older adult members.

Table 52 shows the distribution of disabilities by club. Almost

Table 49

TNT Club Handicapped Members

	A	B	C	D	E	F
Members	20	15	9	10	14	12
Members Observed	13	13	9	9	9	11
Percent Observed	65	87	100	90	64	92

Table 50

Distribution of Sex in Clubs

	A	B	C	D	E	F
Female	7(54%)	6(46%)	4(44%)	7(78%)	3(33%)	8(73%)
Male	6(46%)	7(54%)	5(56%)	2(22%)	6(67%)	3(27%)

Table 51

Distribution of Age in Clubs

	A	B	C	D	E	F
Under 11	0(0%)	0(0%)	7(78%)	0(0%)	0(0%)	0(0%)
12-17	0(0%)	3(23%)	2(22%)	3(33%)	0(0%)	5(45%)
18-23	0(0%)	6(46%)	0(0%)	4(44%)	0(0%)	3(27%)
24-29	2(15%)	4(31%)	0(0%)	2(22%)	7(78%)	3(27%)
Over 30	11(85%)	0(0%)	0(0%)	0(0%)	2(22%)	0(0%)
Mean Age	36.8	20.7	10	19.7	28.9	18.5

Table 52

Distribution of Disabilities in Clubs

	A	B	C	D	E	F	Total
Mentally Retarded	5(38%)	6(46%)	3(33%)	5(56%)	5(56%)	7(64%)	31(48%)
Emotionally Disturbed	3(23%)	0(0%)	1(11%)	2(22%)	0(0%)	2(18%)	8(13%)
Orthopedic	1(8%)	4(31%)	0(0%)	0(0%)	0(0%)	1(9%)	6(9%)
Cerebral Palsy	4(31%)	3(23%)	4(44%)	1(11%)	3(33%)	1(9%)	16(25%)
Sensory	0(0%)	0(0%)	0(0%)	1(11%)	1(11%)	0(0%)	2(3%)
Speech	0(0%)	0(0%)	1(11%)	0(0%)	0(0%)	0(0%)	1(2%)

half of the club members are mentally retarded. One-fourth have cerebral palsy and the remainder are distributed across a number of disabilities. Related to this is the mobility of club members. This is shown in Table 53. Nearly all of the club members are ambulatory.

Table 53

Mobility of Club Members

	A	B	C	D	E	F	Total
Ambulatory	12(92%)	8(62%)	5(56%)	9(100%)	8(89%)	9(81%)	51(79%)
Needs Assistance	0(0%)	1(8%)	0(0%)	0(0%)	1(11%)	1(9%)	3(5%)
Wheelchair	1(8%)	4(31%)	4(44%)	0(0%)	0(0%)	1(9%)	10(16%)

However, in clubs B and C, there are a high proportion of wheelchair members, and this has some influence on activities of these clubs. Speech defects are also common (see Table 54) and have an influence on interaction patterns. Some members without speech use morse code to communicate. For observational purposes, such forms of communication were coded as talking.

Club members involvement in work and education is shown in Table 55. Only slightly more than 25% of the members are not employed or in school. Other involvement of group members in activities are shown in

Table 54

Speech Facility of Club Members

	A	B	C	D	E	F	Total
Normal	7(54%)	4(31%)	2(22%)	6(67%)	5(56%)	7(64%)	31(48%)
Slight Defect	3(23%)	3(23%)	4(44%)	1(11%)	2(22%)	1(9%)	14(22%)
Severe Defect (includes no speech)	1(8%)	5(38%)	3(33%)	2(22%)	2(22%)	2(18%)	15(23%)
Information not available	2(15%)	1(8%)	0(0%)	0(0%)	0(0%)	1(9%)	4(6%)

Table 55

Education and Employment of Club Members

	A	B	C	D	E	F	Total
In School*	1(8%)	3(23%)	9(100%)	7(78%)	1(11%)	6(55%)	27(42%)
Employed Part-time	2(15%)	1(8%)	0(0%)	0(0%)	3(33%)	0(0%)	6(9%)
Employed Full-time	4(31%)	3(23%)	0(0%)	1(11%)	1(11%)	0(0%)	9(14%)
Not Employed or in school	4(31%)	4(31%)	0(0%)	1(11%)	4(44%)	4(36%)	17(27%)
Information not available	2(15%)	2(15%)	0(0%)	0(0%)	0(0%)	1(9%)	5(8%)

*Includes special classes and homebound students.

Tables 56 and 57. On the questionnaire to members or families, they were asked to specify to what other groups members belong and to describe how members spend their leisure time. From responses to the former question, a count was made of the number of groups listed, and this data is presented in Table 56. Nearly half of the participants on whom information is available are in no other groups, and very few are in more than one other group. From descriptions of leisure time, members were classified as isolates, primarily isolates with some family and/or peer activity, and primarily engaged in family or peer activity. The results of this classification are shown in Table 57.

Table 56

Number of Other Groups in Which Members Participate

	A	B	C	D	E	F	Total
0	3(23%)	3(23%)	5(56%)	1(11%)	4(44%)	5(45%)	21(33%)
1	5(38%)	3(23%)	3(33%)	1(11%)	0(0%)	2(18%)	14(22%)
2	1(8%)	2(15%)	0(0%)	0(0%)	1(11%)	0(0%)	4(6%)
3 or more	1(8%)	3(23%)	0(0%)	2(22%)	0(0%)	0(0%)	6(9%)
Information not available	3(23%)	2(15%)	1(11%)	5(56%)	4(44%)	4(36%)	19(30%)

Table 57

Interaction during Leisure Activities of Club Members

	A	B	C	D	E	F	Total
Isolate	5(38%)	3(23%)	2(22%)	1(11%)	4(44%)	3(27%)	18(28%)
Primarily Isolate	2(15%)	6(46%)	6(67%)	0(0%)	3(33%)	3(27%)	20(31%)
Primarily Family or Peer	3(23%)	2(15%)	1(11%)	3(33%)	1(11%)	1(9%)	11(17%)
Information not available	3(23%)	2(15%)	0(0%)	5(56%)	1(11%)	4(36%)	15(23%)

One additional piece of relevant data is available. Based on notes in the files, information from sponsors, and personal knowledge of the researchers, members were classified as shy, outgoing or not-classifiable. Table 58 shows the distribution by club of people in these categories. Although there are an equal number of shy and outgoing members, it appears that more people are classified as shy than is true in a general population.

Together, the data on other groups, leisure activity, and general interaction style form a picture of members who are not engaged with others to any great extent; when such contact is available, it is difficult for a large number of them. This lack of social contact and social skills was described in the introduction as typical of the disabled. Clearly, it is evidenced in the club membership, and it is one of the problems the clubs are designed to alleviate.

Table 58

Personal Interaction Style of Club Members

	A	B	C	D	E	F	Total
Friendly, outgoing	2	5	3	4	3	4	21
Shy	5	4	4	3	2	2	20
Not classifiable	6	4	2	2	4	5	23

Comments from members and families. Questionnaires were returned by 50 of the TNT members observed or their families. In the questionnaire, they were asked to relate the most significant contribution of the club and any other relevant contributions. Responses to either of these questions were coded into one or more of the following categories by agreement of three judges--the club provides: (1) social contact, friendship, (2) physical exercise, (3) entertainment, recreation, enjoyment, (4) social skills education, (5) education in responsibility, (6) a sense of belonging, (7) education about other handicapped people, (8) general confidence development, acceptance, a feeling of importance, and (9) other activities. Since more than one could be coded, the numbers across categories will total more than the number of respondents. Table 59 summarizes the contributions made to members by the clubs. In almost all instances the major contribution was friendship and social contact. Recreation and providing a place to go were also frequently mentioned. All other categories were mentioned only sparsely.

We have already described the isolation of these individuals. It is evident that they and their families recognize that the clubs provide an important means of social contact, which is not otherwise available. To give a better sense of these responses, a few samples are provided:

> "This has given her a monthly event to look forward to and a feeling of participation in a group. This is the only opportunity she has to make friends."
>
> "He enjoys the meetings and seems to get a great deal of good from contact with other people."
>
> "He enjoys other people and children. This is the only opportunity he has had to be a member of a club."
>
> "She has very little opportunity to get out. She likes to go to the meetings. It gives her a chance to mix with people and a feeling that she is useful."

The questionnaires also inquired into contributions of the club to the family. Responses were coded--gives the family: (1) a breather, free time, (2) a chance to meet others with similar problems and share

Table 59

Contributions of TNT Clubs to Members

	A	B	C	D	E	F	Total
Friendship	9	8	7	2	4	4	34
Exercise	1	0	1	0	0	1	3
Recreation	4	3	7	3	2	5	24
Social skills education	0	1	1	0	2	1	5
Learn responsibility	1	2	0	1	0	0	4
Sense of belonging	3	2	1	0	0	2	8
General education	4	2	1	0	2	0	9
Confidence development	0	0	1	1	2	1	5
Other activities	0	2	0	0	1	1	4

concerns, (3) a sense that others care and will take an interest in the handicapped, and (4) an opportunity for more positive interaction. Table 60 shows the responses in each of these categories by club. Many people did not answer this question so relatively few codeable responses are represented in the table. The two categories most frequently cited are providing some free time for the family, who frequently have to care for the handicapped member around the clock, and having a sense that they are not alone, there are others who care. The former is particularly true in the clubs with younger rather than older members.

Sponsors' Background Ratings. Sponsors' descriptions of progress in club members were coded as : worsened (1), no change (2), slight progress (3), or very good progress (4). Overall mean progress for the 49 members on whom data was available[14] was 3.04. This indicates that, in general, there was progress (3.04 differs significantly from 2,

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[14] Not all descriptions were able to be coded, so there are other ratings on more subjects than there are progress ratings. In addition, sponsors knew too little to rate some members.

Table 60

Contributions of TNT Clubs to Families

	A	B	C	D	E	F	Total
Provides free time	0	3	2	1	0	1	7
Chance to share concerns	1	1	0	0	0	0	2
Knowing others care	1	2	2	0	1	1	7
Improved family interaction	0	1	0	0	1	0	2

$t=8.67$, $df=48$, $p<.001$).

An analysis of variance was performed on progress with club membership as an independent variable. There was a difference between the groups approaching significance ($F=2.29$, $df=5,48$, $p<.07$). Club D members were rated as showing less progress ($\overline{X}=2.14$) than members in any other club who didn't differ from each other (Club A=3.17, Club B=3.27, Club C=3.00, Club E=3.40, and Club F=3.13). Club D has a high proportion of mentally retarded members who are institutionalized, and thus, progress may be more difficult for these members. In addition, since different people were rating each club, differences could be reflecting the way the ratings were made. However, the lack of differences between most clubs suggests this is not the case.

In addition, members were divided according to how long they had been known by the sponsor rating them--a short time (0-23 months), an intermediate amount of time (24-59 months), and a long time (60 months or more). An analysis of variance on mean progress scores showed significantly different ratings for these groups ($F=3.22$, $df=2,45$, $p<.05$). More progress was made by the intermediate group ($\overline{X}=3.39$) than the short time group ($\overline{X}=2.64$) with the long time group ($\overline{X}=3.00$) between these and not significantly different from either of them. These differences could merely reflect differential recollection by the raters; sponsors might remember the problems more vividly with recent members and thus, rate less progress. In addition, since the Club D members already discussed were all in the short time group, this could also account for the finding. If, however, these explanations do not account for the finding, it could be that more time is needed to make progress than the short time group had; if enough progress is made, members may drop out of the clubs accounting for the lack of increased progress in long time members. When the analysis of variance is computed with time known as the independent variable, but not including the Club D members, the effect is not significant ($F=1.02$, $df=2,35$, n.s.). Thus, they contribute strongly to the effect. However, it is still not clear whether their newness in the club, their severe disability, or differential ratings by this sponsor cause their lack of progress.

Sponsor's ratings of members on eight bi-polar adjective pairs were numerically converted to a 1 to 7 scale with 7, the negative pole and 1 the positive pole. When members were grouped according to length of time known by sponsors, analyses of variance showed no differences between the three groups on any of the traits. However, grouping the members into new (joined since 1971) and old members (joined prior to 1971) did show differences. The means and t-tests between these groups are shown in Table 61. In all but two instances, new members have higher mean scores than old members evidencing more negative aspects of the attributes. However, in only three instances are the differences between the groups significant. New members are significantly more introverted, less verbal, and less sociable than old members. Although it is possible that this is because of sampling effects, it is suggestive of club influences in helping socialize the members.

Table 61

Mean Sponsors' Ratings of TNT Members' Attributes

Attribute	New Members	Old Members	t	df	p<
Communicative-Non Communicative (C)	3.63	2.86	1.75	59	.10
Independent-Dependent (I)	4.33	4.17	.33	58	n.s.
Extroverted-Introverted (E)	3.94	3.05	2.12	57	.05
Leader-Follower (L)	4.47	4.45	.04	57	n.s.
High Participator-Low Participator (P)	3.26	3.54	-.59	59	n.s.
Mobile-Not Mobile (M)	2.37	2.50	-.24	59	n.s.
Verbal-Not Verbal (V)	4.21	3.10	2.18	59	.05
Sociable-Not Sociable (S)	3.11	2.52	4.54	58	.001

To assess the differences between clubs on the eight attributes, an analysis of variance of the type Subjects (Clubs) X Attributes was performed. Table 62 shows the anlaysis. There was no effect for clubs,

Table 62

Analysis of Variance

Subjects (Club) X Attribute

Source	df	MS	F	<
Club (A)	5	4.85	<1	n.s.
S(A)	53	9.12		
Attributes (B)	7	28.25	15.79	.001
AXB	35	3.23	1.81	.01
S(A)B	371	1.79		

but there was a significant main effect for attributes (F=15.79, df=7,371, $p<.001$) and a significant interaction of club and attribute (F=1.81, df=35,371, $p<.01$). The means corresponding to the interaction are shown in Table 63, with the means corresponding to the main effect shown as row totals in the same table. Club members' ratings on dependency ($\bar{X}=4.19$) and leadership ($\bar{X}=4.46$) were significantly higher than ratings on other attributes, indicating some of the lack of socialization, especially in terms of group interaction, already discussed. However, in general, mean ratings on the attributes were below the neutral point (4) indicating positive ratings.

There were no differences between clubs on ratings of dependency, sociability or introvert-extrovert. Members of clubs B and C have less mobility than other groups, as previously described when discussing disabilities. Club C members are more non-verbal than the other groups. Club A members are rated as significantly lower participators than the other groups. This may relate to the extremely large size of the group or their disabilities and age. Similarly, this group is rated as followers more than the others. Communication differences between groups are small and not easily explicable.

Correlations were computed between the background ratings including progress. These are presented in Table 64. Except for mobility, the eight adjectives are generally correlated. All are related to social skills in groups. Progress, as expected, shows a negative correlation with these social skills, but the correlations are only significant for sociability, leadership, and dependency.

Observer reliability. Reliability was calculated for coding of people and behavior. Overall reliability was the total number of agreements for people and behaviors divided by the total number of comparisons. Thus, this is a conservative estimate of reliability. Two errors for

Table 63

Mean Sponsors' Ratings of TNT Members Attributes

	A	B	C	D	E	F	Total
	N=13	N=11	N=8	N=9	N=9	N=9	N=59
(C)	2.69 opqrs	3.91 ghijklm	3.63 hijklmno	3.00 lmnopqrs	2.56 opqrst	2.44 qrst	3.03 cd
(I)	4.39 ghi	4.36 ghi	3.75 ghijklmn	4.00 ghijkl	3.89 ghijklmn	4.56 gh	4.19 a
(E)	3.39 jklmnopq	3.00 lmnopqrs	3.88 ghijklmn	3.22 klmnopqrs	3.22 klmnopqrs	3.22 klmnopqrs	3.31 bc
(L)	5.23 f	4.27 ghij	4.50 ghi	3.78 ghijklmn	4.11 ghijk	4.56 gh	4.46 a
(P)	4.69 g	3.46 jklmnop	2.50 pqrst	3.11 klmnopqrs	3.44 jklmnopqr	2.67 opqrs	3.42 bc
(M)	1.69 t	3.55 ijklmno	3.25 jklmnopqrs	2.22 st	2.22 st	1.67 t	2.41 e
(V)	3.00 mnopqrs	3.82 ghijklmn	4.63 gh	3.00 lmnopqrs	3.00 lmnop	2.89 nopqrs	3.56 b
(S)	2.39 pqrst	3.00 lmnopqrs	2.38 rst	3.22 klmnopqrs	3.11 klmnopqrs	2.44 qrst	2.70 d
All Adjectives	3.43	3.67	3.56	3.19	3.19	3.01	

Note.--Higher numbers refer to the more negative pole. Within the totals column numbers with the same subscript do not differ significantly $p<.05$ ($LSD_{59}=.40$). Within the table means with the same subscript do not differ significantly $p<.05$ ($LSD_{8,9}=1.10$, $LSD_{8,11}=1.03$, $LSD_{8,13}=1.01$, $LSD_{9}=1.05$, $LSD_{9,11}=1.01$, $LSD_{9,13}=.96$, $LSD_{11}=.96$, $LSD_{11,13}=.92$, $LSD_{13}=.87$).

Table 64

Correlations Between Ratings of TNT Members

	Progress	Not Sociable	Non-Verbal	Not-Mobile	Low Participator	Follower	Intro-verted	Dependent	Non-Communi-cative
Progress	1.00	-.36*	.03	.08	-.24	-.31*	-.19	-.37*	-.19
Not Sociable		1.00	.47**	-.06	.52***	.38**	.54***	.26	.58***
Non-Verbal			1.00	-.01	.30*	.40**	.63***	.40**	.73***
Not Mobile				1.00	-.02	-.26	-.23	.19	-.10
Low Participator					1.00	.59***	.47**	.34*	.39**
Follower						1.00	.66***	.33*	.49***
Intro-verted							1.00	.37*	.52***
Dependent								1.00	.28
Non-Communi-cative									1.00

Note.--Progress is scored in the opposite direction from the other traits so that a higher number is positive.

*$p<.05$ **$p<.01$ ***$p<.001$

people were counted when the coders wrote different people with the same behavior. Errors counted for behaviors were done in the same manner. Table 65 shows reliability over the club meetings. In addition, Table 66 shows overall reliability of observations at the different clubs.

Table 65

Observer Reliability in Percentages

	Range	Mean	Median
Behavior	5-100	64	65
People	0-100	58	54
Overall	19-100	61	59

Table 66

Observer Reliability in Percentages by Club

Club	Range	Mean	Median	Number of Reliabilities
A	37-86	55	54	16
B	44-100	68	66	19
C	23-100	59	61.5	22
D	27-100	64	64	18
E	39-88	59	56.5	14
F	19-82	57	58.5	20

Interaction data. As a gross measure of change in interaction level, all subjects with at least two data points were considered, and the percent of subjects who increased between our first and last observation of them was calculated. This was done for all three types of activity: unstructured, structured and business. Two different measures of total interaction were used. In one measure, listening was not included even when it had been observed. Listening was included in the other measure of total interaction, making it a more conservative measure, since listening data were not collected during later observations; this makes it likely that total interaction would decrease since a form of interaction was no longer included, and we were predicting increased interaction. Table 67 shows the data for all subjects and separately for members who joined within the last year (new members) and those who had been members for a year or more (old members).

Table 67

Number of Members Showing Increased Interaction

	New Members (1971 or later)		Old Members (before 1971)		Total Membership	
Kind of Interaction	No Listening	Includes Listening	No Listening	Includes Listening	No Listening	Includes Listening
Unstructured	$\frac{15}{19}=79\%$	$\frac{14}{19}=74\%$	$\frac{18}{26}=69\%$	$\frac{16}{26}=62\%$	$\frac{33}{45}=73\%$	$\frac{30}{45}=67\%$
Structured*	$\frac{11}{15}=73\%$	$\frac{12}{17}=71\%$	$\frac{16}{23}=70\%$	$\frac{17}{24}=71\%$	$\frac{27}{38}=71\%$	$\frac{29}{41}=71\%$
Business*	$\frac{5}{7}=71\%$	$\frac{5}{7}=71\%$	$\frac{7}{13}=54\%$	$\frac{7}{14}=50\%$	$\frac{12}{20}=60\%$	$\frac{12}{21}=57\%$

*In these instances ties account for the difference in total number of subjects when listening was or wasn't counted.

In all instances, new members showed a higher or the same per cent increase compared to old members, but the differences between these groups are not significant. A significantly higher proportion of the total membership increased than the 50% which would be expected by chance for both (a) the conservative total interaction measure, and (b) total interaction without listening included for: unstructured time ((a) $Z=2.3$, $p<.05$: (b) $Z=3.1$ $p<.01$) and structured time ((a) $Z=2.7$, $p<.01$; (b) $Z=2.63$, $p<.01$). Although for business activity, interaction increased, the increases did not differ from chance for either measure ((a) $Z=0.64$, n.s.; (b) $Z=0.91$, n.s.). Although there was less increased interaction during business meetings than during structured and unstructured activities, the differences in per cents are not significant. Thus, the major hypothesis, that interaction would increase over time in TNT Clubs, was confirmed.

The second major hypothesis tested using the observation data was that interaction with peers should increase over time relative to interaction with adults. This was especially predicted for new members. For the clubs with older members (A and E), adults and peers are not separable, so this was tested using only members of clubs B, C, D, and F.

Since different numbers of Lookouts (L), Handicapped (H), and Adults (A) participate in each group, scores representing the number of interactions with each of these types per person available with whom to interact (L', H', and A') were calculated. (For example, to obtain A' the total number of interactions with Adults (A) was divided by the number of A attending the meeting.) The amount of interaction with adults relative to total interaction (A*) was then calculated by dividing A' by A'+H'+L' for each club member with at least two data points. Table 68 shows the proportion of members in each club for whom A* decreased

Table 68

Proportion of Club Members Decreasing in Relative Interaction With Adults

Club	Structured			Unstructured		
	New	Old	Total	New	Old	Total
B	1/2 (50%)	4/6 (67%)	5/8 (62½%)	1/2 (50%)	3/7 (43%)	4/9 (44%)
C	4/6 (67%)	1/3 (33%)	5/9 (56%)	4/6 (67%)	3/3 (100%)	7/9 (78%)
D	2/4 (50%)	2/3 (67%)	4/7 (57%)	3/4 (75%)	1/3 (33%)	4/7 (57%)
F	3/4 (75%)	2/4 (50%)	5/8 (62½%)	0/4 (0%)	2/5 (40%)	2/9 (22%)
All	10/16(62½%)	9/16(56%)	19/32(59%)	8/16(50%)	9/18(50%)	17/34(50%)

from first to last observation separately for new and old members and for all members. For structured activity, at least 50% of both new and old members in each club showed such a decrease, with one exception. However, in no case was the per cent decreasing significantly higher than 50%, so the results do not differ from chance. For unstructured activities, there was even more variability in the proportion of members decreasing in relative interaction with adults, and again, the proportions do not differ from chance. Thus, this hypothesis was not supported by the data.

It appears that more work needs to be done in TNT Clubs on helping members to become independent of the adult sponsors. However, it is also possible that this is typically true with this age group and not particularly a problem with the handicapped. Since no observations were made of Lookouts, data is not available to test this notion. A better test might have been to compare the amount of handicapped interaction with adults to the amount of Lookout interaction with adults. However, the sponsors' ratings already discussed show relatively high dependency to be characteristic of club members and thus, corroborate these observation findings and lend weight to the conclusion that this is a problem.

Summary

As would be suggested by previous research, handicapped TNT Club members tend to be isolates with little in the way of other group activity or social contact available to them. This is recognized by the members and their families who most frequently cite friendship and social contact as the major contribution the clubs make to their lives. In addition, as expected, the members characteristicly lack social skills. Sponsors rated new club members as less skilled socially than old members, suggesting that the social contact provided by the clubs helps the members practice and improve such skills. The correlation between positive ratings on these skills and the sponsors' progress ratings of members suggests that the sponsors see these skills as relevant and important. In addition, the sponsors' descriptions were coded as generally showing progress suggesting that at least the sponsors see the clubs as helping the members develop skills. Further evidence for this comes from the fact that the least progress was shown by relatively new members, known by the sponsors for a short period of time.

The interaction data provides additional support for the positive value of the clubs. Members showed increased interaction on late observations compared to early observations. This was especially true for new members, although the differences between new and old members did not reach significance.

In one area, the clubs, however, are not as successful as they might be. Sponsors rate club members as somewhat dependent. Observation data suggests that members interact a disproportionate amount of time with adults. Although there is some decrease in relative interaction with adults on later observation, there is not significantly more decrease than would be expected by chance. Thus, dependency on adults does not seem to be improved by the clubs.

In general, TNT Clubs appear to be valuable to members in providing social contact and helping improve social skills.

The Verbal Interaction of Handicapped Teenagers In Junior Achievement

The emphasis in work training settings for the handicapped person has been in teaching him behaviors in two areas which will increase his probability of successful employment. The first area, called work habits, are those behaviors that the dominant culture considers imperative to maintain employment. For the middle class culture, some work habits are appropriate dress, appropriate language, cleanliness, control of emotions, and punctuality. The second group of behaviors is related to the specific job tasks. They are those skills needed to complete satisfactorily a particular job assignment. These behaviors vary according to the task assigned.

Research has indicated that work habits are more critical to job success than job skills. Kolstoe (1961) and Abel and Kinder (1942) found that the major reason for job failure for the handicapped person is work habits.

This study investigated work habits in a specialized work setting, Junior Achievement of Nashville, Tennessee. Junior Achievement is an organization of miniature business companies which are managed by high school students. Each company has 15 to 20 high school students who carry the business through the total business cycle. This operation includes electing officers, selling stock, deciding on a product, buying raw materials for the product, manufacturing and selling the product, and liquidating the company. In addition to the 15 to 20 students who are referred to as achievers, there are 2 to 4 adult advisors who guide the students in the companies' operations.

Junior Achievement of Nashville is housed in a large building which is divided into smaller rooms. Each company is assigned a room for company operations and meets one night a week for two hours on a specified night for company business. All operations with the exception of selling take place in this room at the specified time. Selling usually takes place during the achievers' free time during the week.

Each achiever has the opportunity to participate in all facets (personnel, marketing, and manufacturing) of the business operation and achiever job assignments are varied. Each business operates independently of all other Junior Achievement companies.

One area of work habits which has received no attention in the literature is the verbal interaction of the handicapped person and the work supervisor as well as that of the handicapped person and co-workers. The primary purpose of this study was to describe the quantity and direction of verbal interaction of handicapped persons in the Junior Achievement companies. The direction of verbal interaction was operationalized as type of person, supervisor or peer, who talked to the handicapped person and to whom the handicapped person talked. A secondary purpose was to describe the quantity and direction of verbal interaction in three sizes of groups: one-to-one, small group, and large group.

Method

Subject Selection. The subjects were selected from five settings in the Nashville area. The five settings were Tennessee School for the Blind (TSB), Tennessee Youth Center (TYC), Spencer's Youth Center (SYC), Tennessee Vocational School for Girls (TVS), and homebound students from the Metropolitan Nashville School System. TYC, SYC, and TVS are all state correctional centers for teenagers who have been defined by the courts as delinquent and socially maladjusted.

The recruiting procedures for achievers were identical to those used in all schools with the exception of the correctional centers where only those students eligible to leave the centers were considered. In the case of the homebound students, the recruiting was conducted in the homes, since the students do not attend schools. The standard procedures consist of the executive director or program director attending an assembly at each school and speaking about Junior Achievement. Those students interested fill out a registration card and attend the first meeting.

Subjects. Table 69 depicts a breakdown of the subjects by setting, sex, and age. Of the 13 subjects from TSB, 6 were considered totally blind and 7 were partially sighted. The one homebound student was confined to a wheelchair. No other subjects had any known health

Table 69

Distribution of Handicapped Achievers

Setting	Tennessee School for the Blind	Tennessee Vocational School for Girls	Spencer Youth Center	Tennessee Youth Center	Homebound Student
Total Number	13	14	6	5	1
Male	5		6	5	
Female	8	14			1
Mean Age	16.4	15.8	16.9	16.5	19.4
Age Range	15.3-17.9	14.1-17.2	15.1-17.8	15.2-17.9	

problem. All subjects from TVS, SYC, and TYC were placed at the centers by the courts.

Because of the transportation difficulties, subjects from each center attended the same night. Subjects were placed in companies (only one disabled achiever per company) by randomly placing their cards in company groupings. Special consideration was given the subject in the wheelchair so she would not be on the second floor. In addition, she was beyond the age range of Junior Achievement and therefore could not sign the charter. However she was allowed to participate in all other activities. Questions regarding the subjects from the correctional institutions leaving the building were handled by company advisors in conjunction with the institution for legal interpretation.

Auxiliary Personnel. Eighty-four adult advisors were assigned to the companies. There was an average of 3 advisors per company. The mean age was 35.6 with a range of 21.6 to 58.9. The mean number of years the advisor had participated with Junior Achievement was 2.3 years.

Procedure. Four observers were trained by an outside trainer. Each observer received 8 hours of training which consisted of making observations in companies which did not employ a handicapped achiever. Each observer had to establish a reliability of .90 before observing for the study.

Recording of verbal interaction was made every ten seconds during each ten minute observation period. For ten weeks, data were gathered during one ten minute period per evening in each company. The times of observation remained consistent throughout the study.

Due to the mobility of the group and the different job tasks which occur in the same room, the observers only recorded the interaction of the group where the handicapped achiever was working. The size of the group was noted: one person, small group (10 or less), or large group (10 or more).

During the recording period all verbal responses of the handicapped achiever and any other persons in the same grouping were recorded. Records were made of who talked to the handicapped person and to whom the handicapped person talked. In addition, interchanges between non-handicapped persons were recorded when they were located in the same grouping as the handicapped achiever. Table 70 indicates the categories used in data collection.

Results

Reliability checks were made 3 times for each observer. The reliability ranged from .87 to .96.

A total of 1,911 minutes of observation were taken. During the 194 visits to the 39 companies, 11, 466 responses were recorded. Data were not gathered when subjects were absent or working on a task outside of the company room or building. Of the 11,466 responses, 2,303 were made by handicapped achievers, 2,691 were made by non-handicapped

Table 70

Data Collection Categories

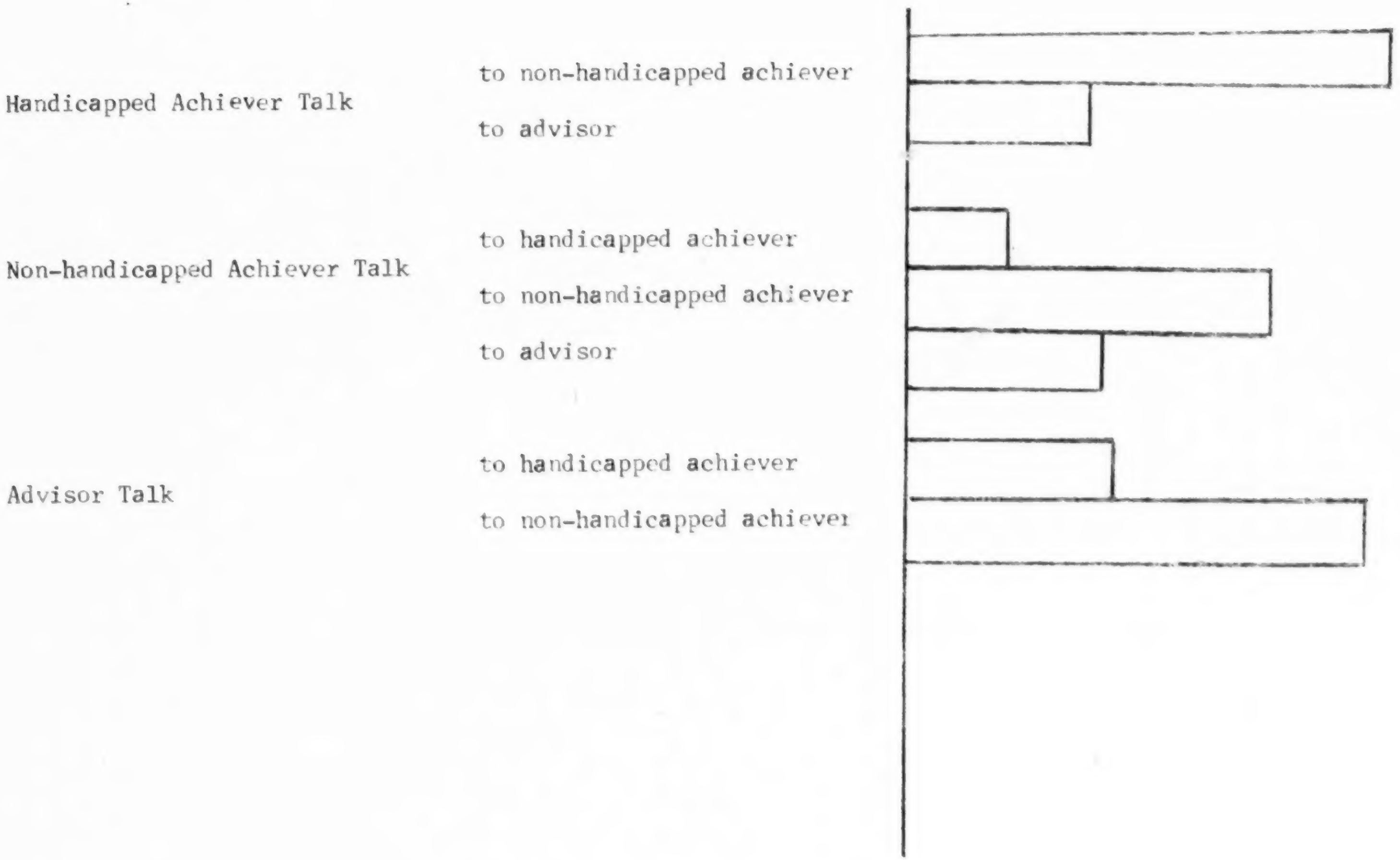
Code		Category
C̸	=	Confusion off task
C	=	Confusion on task
X	=	Silence
H	=	Handicapped talk to one achiever
Ⓗ	=	Handicapped talk to group
H̸	=	Handicapped talk to advisor
N	=	Handicapped talk to another handicapped person
A	=	Achiever talk to the handicapped
Ⓐ	=	Achiever talk to group
A̸	=	Achiever talk to another achiever
A	=	Achiever talk to advisor
D	=	Advisor talk to handicapped
Ⓓ	=	Advisor talk to group
D̸	=	Advisor talk to another achiever
B	=	Other talk to handicapped
Ⓑ	=	Other talk to group

achievers, 2,478 were made by the adult advisors, and 3,994 were classified as confusion (because it was not possible to record who was talking) or silence. Therefore, a total of 7,472 responses could be classified by speaker and listener.

The handicapped achievers made 1,649 responses (72%) to non-handicapped achievers and 657 responses (28%) to advisors. Since there was a 7:1 ratio of achievers to advisors (87 1/2% to 12 1/2%) in the companies, the handicapped achievers talked significantly more often to advisors proportionate to their numbers, and significantly less to other achievers ($Z=-22.46$, $p<.01$; Bruning and Kintz, 1968, pp. 197-198). The non-handicapped achievers made 443 responses (16%) to handicapped achievers, 1,470 responses (55%) to non-handicapped achievers, and 778 responses (29%) to advisors. The advisors made 759 (27%) responses to handicapped achievers and 1,716 responses (69%) to non-handicapped achievers. Figure 23 shows relative talking by each type person.

Figure 23

Verbal Interaction in Junior Achievement



The data were divided into 3 groups according to the number of persons in the groups observed (see Totals in Table 71). There were significantly different patterns of interaction in the varying sizes of groups ($X^2=27$, df=4, $p<.001$).

Table 71

Relative Talking in Different Size Groups

Person Talking	Person to whom talk is directed	One-to-one	Small Group (≤ 10)	Large Group (>10)
Handicapped Achiever	Advisor	210 (32%)	272 (41%)	175 (27%)
	Non-handicapped Achiever	841 (51%)	506 (31%)	302 (18%)
	Total	1051 (45%)	778 (34%)	477 (21%)
Non-handicapped Achiever	Advisor	411 (53%)	367 (47%)	0 (0%)
	Non-handicapped Achiever	211 (14%)	526 (36%)	733 (50%)
	Handicapped Achiever	137 (31%)	249 (56%)	57 (13%)
	Total	759 (28%)	1142 (42%)	790 (29%)
Advisor	Non-handicapped Achiever	513 (30%)	489 (28%)	714 (42%)
	Handicapped Achiever	429 (57%)	190 (25%)	140 (18%)
	Total	942 (38%)	679 (27%)	854 (35%)

In addition, type of person and group size reveal interesting interaction patterns as shown in Table 70. Over 50% of handicapped achievers' talk to non-handicapped achievers was in one-to-one settings. However, when the reverse interaction occurred--non-handicapped achievers' talk to handicapped achievers--it was primarily (over 50% of the time) in small groups. Advisors talked to handicapped achievers in one-to-one interactions over 50% of the time, while talking to non-handicapped achievers on a one-to-one basis only occurred 30% of the time. Clearly, the latter may be an artifact of data collection style, since non-handicapped achiever-advisor interactions were only recorded when they were in the vicinity of handicapped achievers.

Discussion

It is clearly indicated that handicapped achievers were not excluded or ignored in the Junior Achievement setting. Nor did the handicapped person isolate himself by not interacting. The data seem to indicate that the handicapped achievers may have "over interacted." Each handicapped achiever averaged 59 responses while non-handicapped achievers averaged 2 responses and advisors averaged 27 responses. However, it must be kept in mind that the averages may be a function of the data gathering technique. All observations were centered around the handicapped person, so a larger number of handicapped responses would be expected.

The handicapped do interact in all size groups with both adults and peers. Although, adult advisors interacted less with handicapped achievers than with non-handicapped achievers, they interacted relatively more with handicapped achievers proportionate to their numbers. This could be due to the feeling that handicapped achievers need more help to succeed or it could be compensation for negative feelings (an earlier section). Alternatively, the result may merely be an artifact of data collection procedures.

Three interesting interaction patterns developed. First, the handicapped and non-handicapped achievers frequented different size groups. The handicapped talked over twice as much in an individual setting as in large groups. The non-handicapped talked equally as much in all size groups. Over 50% of the handicapped achievers' talk to non-handicapped achievers was in a one-to-one setting. This may be indicative of handicapped achievers feeling more comfortable with one person than with many. Non-handicapped achievers' interaction with other non-handicapped achievers followed an opposite pattern with over 50% of this talk occurring in large groups. This pattern should be investigated further to see if it replicates.

Second, non-handicapped achievers talked more to handicapped achievers in small groups and less in large groups. This may indicate that non-handicapped achievers need others' support in interacting with handicapped achievers, but do not want to draw attention to themselves or handicapped achievers through too large a group. Also in a small group, one does not have to maintain constant interaction as is necessary in one-to-one interaction.

Third, the adult advisors interacted with handicapped achievers primarily on a one-to-one basis; over 50% of the advisors' talk to handicapped achievers took place in a one-to-one setting. Large groups were used least by the advisors for interaction with handicapped achievers. Some of these differences could be due to assisting with skill tasks. However, the advisors used the large group most for interacting with non-handicapped achievers, who should also require skill assistance.

Thus, non-handicapped achievers show different patterns of interaction with handicapped and non-handicapped achievers. In addition, advisors interact differently with handicapped and non-handicapped achievers. The handicapped achiever-advisor interaction is more often in a one-to-one setting.

It can be concluded from this study that verbal interaction with a handicapped achiever is affected by a handicapped person's being involved. However, further research needs to be conducted to determine if the interaction patterns change over time; that is, does extended contact with a handicapped person affect the verbal interaction patterns? Also, research needs to be conducted to see if differing patterns of interaction by non-handicapped persons stimulate varying interaction patterns by handicapped persons. The addition to future research of parallel observations of a randomly selected non-handicapped achiever would be a useful control. As noted, several of the findings may have been artifacts of data collection centering on the handicapped achiever. Comparison with such a control group would help assess which of these findings were not artifactual.

Discussion and Conclusions

This grant was originally approved as a three-year project to evaluate the effectiveness of Outlook Nashville's system of recruiting, training and using volunteers in social and recreational programs for the handicapped, and to develop new methods for improving community participation in these activities.

The first year of the project was devoted to a study of patterns of service, participants, and criticisms of the program by participants. Plans for program evaluation also included development of a battery of psychological tests of self-esteem and attitudes toward the handicapped with the goal of using these measures to determine the effects on these variables of participation in the program. Guidelines were drawn up and manuals written to formalize and describe more clearly the operation of social-recreational (TNT) clubs, with the goal of social integration of handicapped and non-handicapped persons, and the development of materials on recreational activities suitable for handicapped persons. In addition, audio-visual and other materials were developed for use in orientation courses, including contracting for a film to be used both in training courses and in public information programs.

The first year program also included several innovative programs. College students were trained in techniques of behavior management to modify maladaptive social behaviors of handicapped persons. A pilot project designed to integrate handicapped persons into the Junior Achievement program was developed. Training courses, in addition to the usual ones offered, were given for parents and teachers of children in a day care center and for supervisors and employees of Goodwill Industries.

At the end of the first project year an SRS panel recommended that the emphasis be changed from studies of characteristics of volunteers and their training to studies of the effects of volunteer work on the handicapped. At that time plans were made to redirect efforts to follow SRS recommendations.

An analysis of the organizational structure of the Outlook Nashville agency was carried out and several of the recommendations made as a result of the analysis were put into effect during the second project year, but too little time has elapsed since then to allow an evaluation of the effects they may have had on the agency's operations.

Halfway through the second project year, notification was received that because of changes in SRS priorities the grant was to be terminated a year early. Plans that were being developed for a third project year had to be either completely abandoned or substantially revised. The primary emphasis for the second year was on effects of programs on the handicapped participants, and because of the early termination of the grant, there was not enough time left to carry out this research program as fully as originally planned. The study was therefore treated as an exploratory project and data gathered are not as complete or as conclusive as we had hoped.

Although we changed our emphasis from studies of volunteers the first year to studies of handicapped the second year, some of the second year projects were planned or actually begun during the first year, so we continued to collect data on volunteers.

Measures used during the second year to test attitudes and self-esteem were somewhat different from those used the first year, partly because of the change in emphasis and partly because of difficulties encountered in the testing program the first year. Some tests were revised (the semantic differential, for example) and others completely replaced. (The TSCS used the first year is a well researched and effective instrument, but its length and complex scoring system made it inefficient for our purposes.) The collection of test data from volunteers is at best difficult. Problems were encountered because of the length of the instruments, the personal nature of many of the items included, and the general resentment of many people toward any kind of testing. In addition, some of the settings we had at our disposal were seriously inadequate because of noise, space, time available, etc. The following discussion, therefore, is of findings from partially completed projects as well as studies onto which goals not initially set were directed. Our observations must be considered with reservations based on these facts.

Attitude Measurement

Our findings indicate that attitudes of volunteers toward the handicapped do not change significantly as a result of their experiences in working with the handicapped. But our volunteers do continue to work with the handicapped, and are evidently gaining some kinds of reinforcement from this activity. We had hypothesized that not only would attitudes toward the handicapped improve, but the volunteers' self-esteem would also improve. We did not find this to be the case either.

When we tested the attitudes of a group of non-volunteers (Junior Achievers belonging to companies where we placed handicapped members actually had no voice in whether or not they were to be in companies with the handicapped persons), we found that the attitudes were more negative after this experience.

One project was specifically designed to compare the attitudes and self-esteem of volunteers to those of non-volunteers. We had hoped with this study to isolate some variables which would assist us in our recruitment of volunteers by enabling us to predict who will and who will not volunteer. We found no differences between volunteers and non-volunteers in self-esteem or attitudes toward the handicapped. Among the demographic data collected, the only significant variable distinguishing between volunteers and non-volunteers was sex, with a significantly higher proportion of females volunteering.

The failure of attitude measurement devices to show positive change due to treatments is often encountered in studies of attitude change, and the factors involved include, in addition to lack of effectiveness of treatments, the problems of scale validity, changes in correlated variables, and length of time involved. All these are possible explanations of our data. Our judgment is that attitudes toward the handicapped involve social desirability factors which induce high school students to report attitudes which are more positive than their actual behavior would reflect. When they participate in actual social activity with handicapped on a regular basis, their attitudes become more realistic and the social desirability of positive attitudes has less effect on their test performances. This judgment is based, however, on informal reports and observations, and plans to evaluate it by the use of social desirability scaling operations could not be carried out due to termination of the project.

Volunteering

Although we have little measurement information available to help us in the effective and efficient recruitment of volunteers, we have arrived at several conclusions based on our experiences over the past two years.

(1) Volunteers are by definition free agents, and for this and other reasons may not feel obligated to remain in a program if they do not receive satisfactory rewards for doing so. If their experiences are unpleasant or unrewarding, they will drop out. It is usually necessary, therefore, to recruit and train many more people than the number needed because of the attrition rates.

(2) Except for general education purposes, it may not be advisable to offer orientation courses for the general public. We have found that our least successful courses are the general ones, while our most successful ones have been those oriented toward a specific project (such as the summer parks program, TNT clubs, etc.).

(3) Volunteers should not be recruited or trained unless there is a specific job for them to do. Our investigations have found that a substantial number of persons who have finished our orientation courses have had no further contact with the agency at all. In some cases they have worked for other agencies, but in far too many cases they have never made specific use of the training we offered them.

(4) Adequate follow-up and supervision of new volunteers is essential for an effective program. They must be assigned a specific job, be assigned to an experienced volunteer, TNT club sponsor or office staff member in the initial stages of their volunteer activity, and must be followed up by phone calls or visits in order to find out what kind of experience they had, what problems they encountered, and what the agency staff can do to make their volunteer work more pleasant and rewarding. If adequate supervision is to be offered for volunteers, it can be expensive because of the time required of agency staff members. But even so, it is far less expensive to use supervised volunteers than to

hire professional persons to do the same work. In addition, there is a distinct advantage to the use of volunteers in the type of work Outlook Nashville tries to do. Many persons are suspicious of services offered them spontaneously by professional or paid personnel. When social learning services are involved, there is a greater aspect of reinforcement from non-paid volunteers. The person who gives time freely is assumed to care more.

(5) We have found that college and graduate students can be used effectively in volunteer programs such as these. It is important to schedule their volunteer activities in such a way as to coincide with their school calendars, to offer them adequate supervision, especially in the case of undergraduate students, and if possible, because of the amount of time they are required to spend on such projects, academic credit should be considered as additional incentives for their work.

Social Interaction of the Handicapped

To study the effects of TNT Clubs on the handicapped, the situation was viewed as an experiment with the new handicapped member as the subject, the conditions in the club environment as the independent variable, and the sponsors' ratings of handicapped members and observations of interactions of handicapped members as the dependent variables. The disabled members who enter are isolates with little group activity or social contact available to them. New members were rated as less socially skilled than continuing members and the newest members were rated as having shown the least progress when rated early in the year.

Observation of disabled members showed that there was increased interaction during late as compared with early observations; this was especially true of new members. Thus, the clubs seem to be providing socialization experiences where disabled members can and do acquire social skills.

Similar observations were made of participants in Junior Achievement. In this task situation, different kinds of skills are required. However, there is evidence that job failure for the handicapped is due more often to problems with work habits than job skills. Thus, in this seemingly very different setting, social skills not very different from those required in TNT clubs are important.

The disabled achievers were successfully integrated into the program. They were not isolates and in fact had high rates of interaction. Their interaction patterns were somewhat different from the non-handicapped achievers observed, in that they interacted more frequently on a one-to-one basis than in groups. This may reflect their lack of social skills. No evidence is available as to whether these patterns changed over time with interaction experience.

The fact that disabled achievers' interaction was so successfully developed may be due in part to the type of disabled in this pilot program. The blind and the juvenile offenders are probably less isolated and more socially skilled than the typical TNT Club member. However, data for comparisons between these groups are not available so such contrast is highly speculative. The success of both programs does show the feasibility of integrating handicapped and non-handicapped in a variety of settings.

Further Research

In part because of its premature termination, this project has come up with more questions than it has answered.

The recruitment and training of volunteers is an important area for further investigation. The question of how volunteers differ from non-volunteers fits into a line of helping research which has developed in social psychology. Learning more about volunteers would be useful for more efficient recruiting. Such studies should include in-depth interviews with volunteers and non-volunteers in addition to the paper and pencil techniques we utilized.

Investigation of the rewards provided by volunteer experience should also help in retaining volunteers. Rewards need to be provided for volunteers early in their experience and should be continued at frequent intervals. Systematic study of such a reward system would be interesting and useful.

Our attitude research was unable to look at differences between specific kinds of disabilities with which volunteers worked and relative changes in their attitudes towards people with these disabilities. Such research should improve our knowledge of the relationship between attitudes and experience.

Continued observation of interaction between handicapped and non-handicapped people would provide useful information on outcomes of the experience provided in addition to more details on how the outcomes are obtained. Adding observation of the non-handicapped would be useful for comparison purposes.

Obtaining parallel data from social programs such as TNT Clubs and task experiences such as Junior Achievement would be useful for better understanding the similarities and differences between them. It is probable that the disabled must be more socially skilled to enter and successfully remain in a less sheltered program with more requirements such as Junior Achievement.

Further data on the success of TNT Clubs could be gained through individual assessment of members. This had been planned for the third year of the project.

Data on task skills of disabled achievers compared to other achievers were also to be gathered during the third year. In addition, contrasting observational data on disabled and non-disabled achievers gathered with identical procedures is suggested.

Since our method had the handicapped always under observation for interaction, whereas the non-handicapped were scored only when interacting with the handicapped and not with each other, comparisons between the groups on measures of interaction are not appropriate. To alleviate this, parallel interaction measures on the handicapped and the non-handicapped are suggested in future work.

Feedback data on training courses should be accumulated, including enrollment and subsequent volunteering figures as well as evaluation data on utility of course content and additional material needed. We especially regret the lack of an additional year to follow through on this part of the project.

Bibliography

Barker, R. G. Ecology and motivation. In M. Jones (Ed.), *Nebraska symposium on motivation.* Lincoln: Univ. of Nebraska Press, 1960.

Beckman, L. Locus of control and attitudes toward mental illness among mental health volunteers. *Journal of Consulting and Clinical Psychology*, 1972, *38*, 84-89.

Bem, D. J. (Ed.). *Beliefs, attitudes, and human affairs*. Belmont, California: Brooks/Cole, 1970.

Bialer, I. Conceptualization of success and failure in mentally retarded and normal children. *Journal of Personality*, 1961, *29*, 303-320.

Blanton, R. L. and Nunnally, J. C. Semantic habits and cognitive style processes in the deaf. *Journal of Abnormal and Social Psychology*, 1964, *68*, 397-402.

Boshier, R. Self esteem and first names in children. *Psychological Reports*, 1968, *22*, 762.

Carroll, M. Experimental project with handicapped teenagers. Talk presented at the annual conference, Council for Exceptional Children, Division of Visually Handicapped, Washington, D.C., March, 1972.

Clore, G. L. and Jeffery, K. M. Emotional role playing, attitude change, and attraction toward a disabled person. *Journal of Personality and Social Psychology*, 1972, *23*, 105-111.

Davison, G. C. The training of undergraduates as social reinforcers for autistic children. In Ullman, L. P., and Krasner, L. (Eds.), *Case studies in behavior modification*. New York: Holt, Rinehart, and Winston, 1965.

DeSoto, C. B., London, M., and Handel, S. Social reasoning and spatial paralogic. *Journal of Personality and Social Psychology*, 1965, *2*, 513-521.

Dinger, J. C. Post school adjustment of former special education pupils with implications for curricular revision. Unpublished doctoral dissertation, Pennsylvania State University, 1958.

Ellis, E. T., and Page, J. F. Lookout training course. Unpublished manual for instructors. Nashville: Outlook Nashville, Inc., 1967.

English, R. Combatting stigma towards physically disabled persons. *Rehabilitation Research and Practice Review*, Fall, 1971.

Farina, A., Allen, J., and Saul, B. The role of the stigmatized person in affecting social relationships. *Journal of Personality*, 1968, *36*, 169-182.

Farina, A., Gliha, D., Boudreau, L., Allen, J., and Sherman, M. Mental illness and the impact of believing others know about it. *Journal of Abnormal Psychology*, 1971, *77*, 1-5.

Fischer, E. H. Altrusitic attitudes, beliefs about psychiatric patients, and volunteering for companionship with mental hospital patients. *Proceedings*, 79th Annual Convention, APA, 1971, 343-344.

Fitts, W. H. *Manual for the Tennessee Self Concept Scale*. Nashville: Counselor Recordings and Tests, 1965.

Fitts, W. H. The self concept and psychopathology. *Dede Wallace Center Monograph IV*, Nashville, Tennessee: Counselor Recordings and Tests, 1972a.

Fitts, W. H. The self concept and performance. *Dede Wallace Center Monograph V*, Nashville, Tennessee: Counselor Recordings and Tests, 1972b.

Fitts, W. H. The self concept and behavior: overview and supplement. *Dede Wallace Center Monograph VII*, Nashville, Tennessee: Counselor Recordings and Tests, 1972c.

Fitts, W. H. and Hamner, W. T. The self concept and delinquency. *Research Monograph No. 1*, Nashville: Nashville Mental Health Center, 1969.

Goffman, E. *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

Goodkin, R. Case studies in behavioral research in rehabilitation. *Perceptual and Motor Skills*, 1966, *23*(1), 171-182.

Goodman, M. and Goldbaum, R. Integrating mental retardates in normal groups. *Jewish Community Center Program Aid*, Winter, 1964-65, 1-3, ff.

Gore, P. M. and Rotter, J. B. A personality correlate of social action. *Journal of Personality*, 1963, *31*, 58-64.

Greenbaum, J. J. and Wang, D. D. A semantic differential study of the concepts of mental retardation. *The Journal of General Psychology*, 1965, *73*, 257-272.

Heap, R. F. Behavior therapy programmed training course. Unpublished manual, Central State Psychiatric Hospital, Nashville, Tennessee, 1970.

Hersch, P. D., Kulik, J. A., and Scheibe, K. E. Personal characteristics of college volunteers in mental hospitals. Journal of Consulting and Clinical Psychology, 1969, 33, 30-34.

Holmes, D. A study of the problems of integrating physically handicapped children with non-handicapped children in recreational groups, Volume II. Final Report, Children's Bureau Demonstration Grant, Associated YM-YWHA of Greater New York, 1966.

Humphreys, L. TNT Clubs Handbook. Nashville, Tennessee: Outlook Nashville, Inc., 1971.

Humphreys, L. The working of Outlook Nashville's TNT Clubs. Talk given at Outlook Nashville, Inc., Nashville, Tennessee, 1970.

Jordan, J. E. Attitude-behavior research on physical-mental-social disability and racial-ethnic differences. Psychological Aspects of Disability, 1971, 18, 5-26.

Jordan, J. E. Attitude behaviors toward mentally retarded persons: a cross cultural analysis. East Lansing, Michigan: Michigan State University College of Education, 1970.

Kazdin, A. E. and Bryan, J. H. Competence and volunteering. Journal of Experimental Social Psychology, 1971, 7, 87-97.

Lefcourt, H. M. Internal versus external control of reinforcement: a review. Psychological Bulletin, 1966, 65, 206-220.

Lynch, M. D. Multidimensional measurement with the D statistic and the semantic differential. Paper presented at the American Educational Research Association, Chicago, April, 1972.

Meyerson, L., Kerr, N., and Lazar, I. Rewards and Reinforcements in Learning (Film). Scottsdale, Arizona: Behavior Modification Productions, 1968.

Meyerson, L., Kerr, N., and Michael, J. L. Behavior modification in rehabilitation. In Bijou, S. W. and Baer, D. M. (Eds.), Child development: Readings in experimental analysis. New York: Appleton-Century-Crofts, 1967.

Morgan, J. J. B. Effects of non-rational factors in inductive reasoning. Journal of Experimental Psychology, 1944, 34, 159-168.

Nunnally, J. C. Popular conceptions of mental health: their development and change. New York: Holt, 1961.

Osgood, C. E., Suci, G. J., and Tannenbaum, P. H. The measurement of meaning. Urbana, Illinois: University of Illinois Press, 1957.

Bibliography (cont.)

Page, J. F. Summary of tentative research results concerning efficacy of basic Lookout training course and characteristics of persons who volunteer to take the Lookout course. Nashville, Tennessee: Outlook Nashville, 1968.

Palmerton, K. E. A study of the nature and determinants of attitudes of college counselors toward physically disabled persons. *Dissertation Abstracts*, 1968, *28*(12A), 4828.

Pumphrey, M. W., Goodman, M. B., Kidd, J. W., and Peters, E. N. Participation of retarded children in regular recreational activities at a community center. *Exceptional Children*, 1970, *36*, 453-456.

Pumphrey, M. W., Peters, E. N., Flax, N., and Goodman, M. EMR social participation in groups compared to that of normal children. Paper presented at Region V Annual Conference American Association on Mental Deficiency, 1970.

Robinson, J. P. and Shaver, P. R. *Measures of social psychological attitudes.* Ann Arbor, Michigan: Institute for Social Research, The University of Michigan, 1969.

Rosen, T. J. False feedback, perceived competency, and need for fear control in a fear communication setting. Unpublished master's thesis, University of Wisconsin, Madison, Wisconsin, 1970.

Rosenberg, M. *Society and the adolescent self-image.* Princeton, New Jersey: Princeton University Press, 1965.

Rosenhan, D. The natural socialization of altruistic autonomy. In J. Macaulay and L. Berkowitz (Eds.), *Altruism and helping behavior*, New York: Academic Press, 1970, 251-268.

Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 1966, *80* (1, Whole No. 609).

Siller, J., Ferguson, L. T., Vann, D. H. and Holland, B. Structure of attitudes toward the physically disabled. *Studies in Reactions to Disability XII.* New York: New York University School of Education, 1967.

Staats, A. W. and Staats, C. K. *Complex human behavior.* New York: Holt, Rinehart, and Winston, 1963.

Strickland, B. R. The prediction of social action from a dimension of internal-external control. *Journal of Social Psychology*, 1965, *66*, 353-358.

Sultana, K. *TNT Club: Recreational activities.* Nashville, Tennessee: Outlook Nashville, Inc., 1971

Bibliography (cont.)

Thorp, R. G. and Wetzel, R. J. Behavior modification in the natural environment. New York: Academic Press, 1969.

Thompson, W. Correlates of the self concept. Dede Wallace Center Monograph VI, Nashville, Tennessee: Counselor Recordings and Tests, 1972.

Wallston, K. and Goldstein, P. Attitudes toward multiple sclerosis. Unpublished paper, 1969.

Wintker, L. R. The use of a triadic model of social habilitation in vocational rehabilitation. Unpublished master's thesis, Vanderbilt University, 1971.

Yuker, H. E., Block, J. R., and Younng, J. H. The measurement of attitudes toward disabled persons. Albertson, New York: INA Mend Institute at Human Resources Center, 1970.

Ziller, R. C. and Grossman, S. A. A developmental study of the self-social constructs of normals and the neurotic personality. Journal of Clinical Psychology, 1967, 23, 15-21.

Ziller, R. C., Hagey, J., Smith, M. D. C., and Long, B. H. Self-esteem: A self-social construct. Journal of Consulting and Clinical Psychology, 1969, 33, 84-95.

Ziller, R. C., Megas, J., and DeCencio, O. Self-social constructs of normals and acute neuropsychiatric patients. Journal of Consulting Psychology, 1964, 28, 50-63.

Appendix A

The Working of Outlook Nashville's TNT Clubs

I would like to talk about the TNT Clubs. There is a difference between a TNT Club being self-sufficient and being independent. I prefer that clubs work toward being self-sufficient. Being self-sufficient means that a club can set up, plan, and conduct its own meetings. They can take care of their own calling and can establish the primary relationships necessary between the Lookouts and the handicapped. They can carry over from the positives in the TNT Clubs, e.g., they can have contact with each other outside of the TNT Club and still feel comfortable in their community. Another requirement for self-sufficiency is that the TNT Club can sustain its relationships with its governing bodies. For instance, in each Methodist Church there is a Christian Social Concerns Commission that regulates its church's involvement with the TNT Club. It would be up to the club and its sponsors to keep those relationships working smoothly. Another criteria for being self-sufficient is that a TNT Club know when to ask for help when they have a problem that falls outside the realm of their training and competency. Also, they must constantly realize that they do not have all the answers. They cannot say "I can handle things fine without any help." None of us can do things on our own with a program of this kind.

We have had some TNT Clubs who did become quite independent. Usually they would really go it alone, not ask for help from the office, not want help from the office, and sometimes they got into great difficulty. The first thing that would usually happen is that they would revert to the teacher-pupil oriented activity with one sponsor being dominant. This would lead to all kinds of problems with that particular sponsor because then she would "become paranoid" and assume that nobody else was willing to help. The sponsor had to carry the ball all by herself. She would bring many, many negative feelings to the meetings which would be transmitted verbally and non-verbally. This would also foster a growing lack of participation by all. The handicapped stop coming, the Lookouts lose interest, the sponsoring group gets sour, and the Church wonders if it's worth it or not. The atmosphere becomes cold. There are not things happening at every meeting. Relationships cease to mature, and more and more we come back to the same old question that our uneducated community asks over and over again, "What can the handicapped really do?" When the club becomes very independent you hear this lament over and over: "We cannot plan any activities because the handicapped cannot really do anything" and they have ceased to function on a workable level. Also when the clubs get all this independent the office becomes frustrated, because we cannot find out what is happening. Then you really wonder whose fault it is. Is it the fault of the office because they have allowed this club to become independent? Is it the fault of the sponsors because they have such strong personalities that they want to take over? Or is it the fault of the office because their training of these people stopped at the training course before they had had any experiences with the handicapped? I really believe the fault lies primarily with the office and the fact that we have not supported the club. Most of our TNT Clubs at this time are becoming more and more independent, and I think we have to take some very definite steps to lead them towards self-sufficiency.

There are some other reasons we do not want a TNT Club totally independent from us. The atmosphere cools and the sponsors get disillusioned. I have talked about this a little, but there is no one any more bitter than a bitter social worker, and when these sponsors become disillusioned they have very few kind words to say about Outlook Nashville. Also, the needs of the handicapped are not really met. Many times it has taken us two or three years to get these handicapped out of their houses. If they come to a TNT Club and have a bad experience, they may never attend again. We may actually be doing more harm than good. The third thing is, the staff needs to know what is going on for teaching purposes. In our training courses we utilize the people in our TNT Clubs. We have to know who is going to be able to put their ideas across in a training session. We need our Lookouts and handicapped to help us teach new Lookouts. Number four, we still have a responsibility to protect the handicapped. For instance, there was a situation in which a TNT Club sponsorship wanted to buy a child a new wheelchair. His wheelchair was obviously falling apart. The plans for buying this wheelchair got pretty far along before the staff found out about it. When we did find out about it our first move was to call Easter Seal to see if this child was on Crippled Children's Service financially, if he really did need it (because we must cooperate with the other agencies); and did Easter Seal think this was a good activity that the sponsors could do? We got a very quick "No" from Easter Seal because the child was slated for a round of surgery in hopes that he would be able to walk. The family knew this, but the child did not. They didn't want to tell him six months ahead of time that he was going to have six or eight very painful operations. What we did was go to the sponsors of the TNT Club, explain the situation, ask them to keep it in the strictest confidence that the wheelchair was really not in this child's best interests, and just to hold off for a while. The sponsors were very upset with the office because we had "knocked down their little pile of blocks." However, they did go along with us and the child has stayed in this TNT Club long enough that they can see him walking in the door. I really think if they had gotten the wheelchair the child and his family would have lapsed back into the wheelchair behavior rather than using all of their adrenalin--and it took a lot--to get this child to the point where he could walk.

We also have to protect the Lookouts, and sometimes sponsors need help in this. For instance, a handicapped person will discover the telephone (and you have heard this so often, it happens so frequently)--the handicapped who constantly calls the Lookout. There can be over-attachment between the handicapped families and a sponsor, or a sponsor and her family. Sometimes the handicapped person will want to live with the sponsor, and the sponsor certainly needs someone to come in and help make this a more socially acceptable situation. Sometimes the mother of a handicapped child will become overattached to a sponsor, and sponsors are not really in a position to protect themselves. It can also work the other way, with the sponsor over-attaching himself to the handicapped.

I have to say a word about safety. Safety, of course, in the swim training is absolutely essential, and the first think we tell our Lookouts is that it takes 30 seconds for someone to drown. We don't emphasize it quite that much in the TNT Clubs, but I think every time we go outside with a group, if we have any hyperactive retarded, we need to be aware that they will "take off over the hill," and we will have a hard time finding them. We just don't want any of our TNT Clubs wandering onto the street or what-have-you. Now the sponsors need constant reminders about this because this is very much out of their realm of functioning. In one of the teenage clubs two of our slightly retarded 19-year olds, a boy and a girl, disappeared into the church. I did not really know how competent they were. I did know that they were physiologically pretty mature. I wanted to find out where they were and do it in such a way that they didn't feel I was checking up on them. This is absolutely essential. There was also a situation of a retarded boy who saw one of our girls in a wheelchair. The only way she can stay in the chair is when she has her arms draped over the back of the chair. She looks terribly uncomfortable, but that is preferable to her falling out of the chair. He didn't realize this, wasn't able to think through the whole situation, so he was very carefully trying to take her out of her wheelchair. Unfortunately she does not have speech and she could not tell him to leave her alone. Sponsors need help with these situations.

There is also the problem of diet. Such as the diabetic boy who comes to the TNT Club and eats all of the cookies and sugar that he can poke into his mouth. He's going to be sick, comatose, or something else. We have to help the sponsors in this. I don't believe that they can handle all of these things.

Therefore, when we as a staff support the sponsors of the TNT Clubs in these ways and some others that I will outline in a few minutes, we are allowing them the freedom necessary to share their normal community activities with the handicapped. They would not be doing this if we had not stimulated them. Without our continued support and inservice training right at the club meetings, they would not be able to have social relationships with the handicapped to a satisfactory degree. Nor would they realize that they too are growing. They would not know how to handle their feelings from time to time or that anybody else had ever thought the same way they did. They would feel unique and isolated.

The TNT Club is a dynamic thing, changing constantly To find out what is really going on in one TNT Club, you must go three or four months with a very special attitude. You must know what to look for. We really do not have much more time with our TNT Clubs. They have put up with inefficiency, having everybody pulled out of the TNT Clubs and come back to the office; they've put up with our lack of support. They have had abuse from our handicapped families, and I feel we either have to give these clubs the support they need or try some other way. For the first year and a half that I worked in TNT Clubs, I really did not believe they were the most efficient way to get to the handicapped. I have not been able to think of anything any better. The Park Program develops the feelings that we want to have in the TNT Club in a much shorter time period, but it only lasts 10 weeks a year. Many times the youngsters involved with the park go into TNT Clubs and they carry over some of their positive feelings from the Park Program. When a group meets every day all day long with one paid worker who is supposed to do the things that you tell her to, you can have a more closely run, closely supervised program. Often we see some of these same benefits in the TNT Clubs. Many of our handicapped children are involved in programs, educationally and otherwise, in our community. I don't believe we need to feel the TNT Club is the only place these youngsters have to go. Therefore, I don't feel that we can justify a poorly run TNT Club or one that meets and does nothing else, as being of real benefit to the handicapped younsters. They need a place where they can learn the social skills they are going to need for the rest of their lives.

To understand how the TNT Club works, we must look at each group of people involved, find out what we need to look for in these groups, and learn how the staff should react to these people. Let's look at the handicapped group first.

The severely physically handicapped have many things in common. Transportation is difficult. They have few friends, particularly those who have moved from the neighborhood where they grew up. An example of this is an eleven-year old boy who had previously been accepted in the neighborhood where he grew up, moved to a very nice middle class neighborhood, and when the youngsters in the new neighborhood realized that he was having seizures outside and would fall down occasionally, they started throwing rocks at him, knocking him off his bicycle and taunting him to the point that the family had to make the child stay inside. He had none of these problems in his original neighborhood. The severely physically handicapped tend to say that they are shy because it is so difficult for them to get around and mix with a group. Sometimes ways of maneuvering wheelchairs can be pointed out to these people to help with this, but it is always a problem. Somebody sitting in a wheelchair at a party will miss a great deal of conversation because they are just too low to hear it.

Another thing that has to be recognized with this group is the weather limits. Ice and snow keep these people in the house, because no one can take the chance of falling with the wheelchair. Architectural barriers are limiting. One group wanted to go to the Grand Ole Opry and there was a great deal of effort involved in getting these people inside the Ryman Auditorium. Severely physically handicapped include boys who get basketballs for Christmas they they cannot bounce. Speech problems add to their already difficult problems. For instance, a youngster who has a hard time getting around and has the additional problem of speech is not going to be able to talk to a group to make them feel comfortable about his other physical handicap. The reactions of the normal people will limit his ability. One youngster was making a talk to a church group, doing very well with the talk even though he does have speech problems, and I was watching the group. I saw many different expressions in the group. Some people could not look at him. Some people were smiling, and some people looked like they were going to throw up. All of these people were "with" this youngster, and he had to understand that these people were behind him even though their facial expressions made it very difficult.

Sometimes these people are resentful of asking for help. Somebody who realizes it's going to be a burden to ask someone to get them out of the wheelchair will stay in the wheelchair long after he needs to get out of it. Going to the bathroom may be a problem. Sometimes help is not available. Not everyone can take somebody to the bathroom. After this group becomes a part of a TNT Club and they feel they are over their initial introduction, they can be easily swayed. You can see this in the elections and by their reaction to the dominant Lookouts in the group. If one Lookout says "Let's all do this," they'll go along with that one. If another Lookout is more popular, they'll go along with that Lookout. It takes some time for them to realize that they have ideas of their own. Many of them have not had enough experiences to really have a preference.

This group has lots of emotions. They either love or hate. There's no in between. They adore a Lookout or they hate him. He can do no wrong or he can't do anything right. Soap operas are a big part of this group's world because they're at home all the time. Soap operas are really not good teachers of boy-girl family relationships. But this is what they have to work with. They hear all about illegitimacy, murder, lying, cheating, and unhealthy family relationships from 1 o'clock to 4 o'clock every afternoon. What is reality for this group? One girl decided that she wanted a rich husband and a two-story house, and how she planned to get up and down the two stories no one ever really knew. Her criterion for success was "rich and handsome."

There has been no training for future sexual roles. They lack the training of home economic skills for girls, pre-vocational training for boys, and what their roles are going to be in the future. This is one of the things a TNT Club can certainly do.

As a group, they tend to have very little sense of humor. They have an inadequate self concept. They become very difficult after their initial stages into the TNT Club because they develop rapidly; they have the same limits as always, and then they get depressed. It is very difficult to keep the community going into them as much as they need it. Apathy in this group means trouble. If they're happy, that's great; if they're unhappy, I like to find out why; but if they're apathetic, I stay with them.

Let's talk about severely mentally handicapped people. They tend to be either withdrawn or hyperactive. They respond rapidly to the therapeutic community and the feelings of warmth existing in a TNT Club. Sometimes you even wonder if they really are limited because they respond so well and so quickly. They laugh too much; they cry too much; they get on jags; they are dangerous to other handicapped people; they reach for crutches; if they say anything at all, it's inappropriate and can hurt someone's feelings. But they can be a real joy to the group and the backbone of a TNT Club. Safety with this group is a very important thing that all staff has to be aware of.

In a moderately handicapped group, I like to think of them as people who can communicate after a fashion and can locomote to a limited extent. These are some of the things that you need to be aware of as you're in a TNT Club with this group. First of all you have those people who do not need a TNT Club because they are too busy. They have outgrown us. Secondly, you have the group who needs the TNT Club for socialization. They are a hard group, because as a group they probably have the most inadequate self concept of all. They may look perfectly normal, realize that they cannot "cut it" in the real world, and will have more problems adjusting, sometimes, than your more severe physically handicapped. For instance, deaf children and the slightly retarded come into this group. I believe the Retarded Association said they were more concerned about the moderately retarded youngsters in their teen years because it was at this time that these youngsters realized for the first time that they really would never be able to lead a normal life. They see their normal friends outgrowing them. They can't "cut it" in school any more and this leads to social rejection, with ensuing deep depression. They again do not know how to prepare for adulthood and they do not have the necessary feeling of "being better than my old man." Many of the special ed and school programs end at age 18, and the circle of involvement is greatly reduced. This is when the TNT Club may be the only place this youngster has to go.

We need to look at the Lookouts, and I would like to talk about the teenage and adult Lookouts as one group. These are the things the staff has to understand before they're going to be able to relate to this group. Why do they take the training? One reason is curiosity. One woman said, "I did not want to feel that there was a group I couldn't relate to." Another reason is they really want to help. Many of them do not know what real help is and have to be taught. Some Lookouts may have a handicapped member in their family or in their neighborhood. Many times the Lookout training appeals to individuals rather than a group. When a young Lookout takes our training he becomes apart from his peer group, so he may need a lot more reinforcement from the Outlook office and his family to hold the friendships in his peer group. Our course does tend to set people apart from their peers.

What is the makeup of a Lookout? He is probably not in the "in" group, such as a cheerleader. He does think for himself, but he will be unsure of himself. He is not necessarily supported by his family in this activity. He may or may not be able to verbalize his feelings, but he learns to with help from the office. He is conscientious most times to a fault. He is exceedingly vulnerable. He wants to know that he is doing a good job and that he is not hurting anybody. His feelings are easily hurt by the handicapped. It is like offering love. The Lookout has to have positive reinforcement from his fellow Lookouts, sponsors, and the office to help him see progress or he becomes disillusioned and drops out of the program. He will say, "It's no fun anymore." Your adult Lookouts have an additional problem of relating more easily to teacher-pupil oriented programs. Here comes Outlook Nashville with a self-motivating program! They have many habits to unlearn. They are very willing, but it does take time and recognition of this situation by the staff to help them get through it.

Sponsors have the same feelings as Lookouts. They feel in addition the responsibility of the total group--the total TNT Club. This includes relating to the parents of the handicapped and the Lookouts, and in this speech, I have not said very much about parent relationships because I feel that after we have been to TNT Clubs for several months we will need to come back together and discuss in depth the problems of parents.

The sponsors also feel responsible to the church. There are more places in the TNT Club for them to be frustrated. It requires a great deal of time to be a TNT Club sponsor. One lady told me that she spent 20 hours of preparation for each TNT Club meeting. We did try to get this time worked down somewhat. It takes time, cooperation, and skill. Sponsors, being adults, and sensitive adults, have had more life experiences than our young Lookouts and they are going to hurt more. As a group--I think this is terribly important--they lack the confidence to discipline, and to help Lookouts and handicapped overcome their awkwardness.

What should the role of Outlook Nashville be? The first thing is to help a club move toward self-sufficiency. The second thing is to maintain contact with the club so that we can communicate back and forth. The third thing is to keep the club aware of the concepts. Number four is to help with the trouble spots, and five, Outlook Nashville uses TNT Clubs for staff training.

What should the attitude of our staff be as they go into a TNT Club? First of all, let's look at our motivation. (1) We are getting a salary; our motivation is not the same as the sponsors. They are not getting a salary. (2) We want to do a good job, and there is a tremendous reward in working with these people. It all comes back to us. (3) I think we are motivated by intellectual curiosity. Can this thing really work, and how does it work? It's a fascinating idea to play with. (4) We have the fulfillment of a group here at the office working toward a common goal, research, friendships, and the development of ourselves. This is a great protection to us as staff, and it is something that sponsors do not have. Therefore, as you go into a TNT Club your basic attitude must be that the Volunteer is the Ultimate. It is one person giving himself so that another may have additional opportunities. You have the professional looking up to the volunteer. You have a small number of professionals working with a large number of volunteers. This is different from what you see in most organizations that utilize volunteers. Most places have a strong professional staff with the volunteers working within the framework of their professionalism, probably imitating professional behavior. We must remember that with the proper training the volunteers will be able to do things that the professionals cannot do in the community. You are there to serve the volunteers. I prefer the word "serve" to "help." You work for their acceptance. You do not go to observe because you won't see anything. Go to be a member of the group. You want to belong there.

How do you get this basic attitude across to the volunteers? When they say "I'm glad you came," you let them know that you looked forward to coming. When they say "thank you," say "I appreciate it. You made me feel welcome." Accept their thanks but include them in it. Show that their relating to you made you feel good, made you more able to do your job. Be sincere, be loose, let them know you--not your whole life--just that part of you that goes to the TNT Club.

Handicapped youngsters and adults can spot somebody who is gushy and insincere a mile away. So don't say anything that you don't mean. During the meeting stay in the background. No staff member needs to be the center of attention. If you have suggestions for a sponsor, make it during the month before the meeting, not during the meeting. You do not want to take the stage. You want to be a regular participant because you want to come. You are never completely sure of yourself. You have no pat answers. Their ideas are as good as yours. Brainstorm together. Soon they will realize that you keep throwing in the concepts of Outlook Nashville into your discussions. We will have some group sessions after you have been to some TNT Club meetings where you will learn exactly how to do this.

What concrete things do you do at a TNT Club? Get there early. Do anything you can to help. Move tables, cut out paper dolls, whatever they need. During this time meet people, especially sponsors and parents. Concentrate on them. Engage them in conversation. After the meeting begins, stay in the background. You can do more in the background than you can do up front where the program is. Look for the lone sponsor who cannot yet involve himself. Stand beside him. Help him move over to a Lookout or a handicapped youngster. Look for the handicapped child that's by himself. Look for the Lookout by himself. Get them together, but don't leave them until they can let you leave them. In all of your dealings with handicapped and Lookouts, include a sponsor. Look for trouble spots. Include a sponsor and a Lookout in the solution.

After the meeting, talk with Lookouts and handicapped together. Did they enjoy the meeting? What did they get out of it? What are their plans for next week? Don't ever be by yourself at a TNT Club meeting. Work through Lookouts to get to handicapped; work through sponsors to get to Lookouts. Point out the positives to the handicapped families, something positive that their family member did. To the Lookouts, you watched them work. It was great. Ask questions, simple questions. Can he understand her? Does he share? Do you see a change in him? Don't use any technical jargon. Get acquainted with slang. Work quickly to the point where you can ask very personal questions about their interaction. What are their hangups? What is difficult for you to do? When do you feel uneasy? Always follow up these conversations with the positive.

Come back to the office and talk. You have to have several ideas about a TNT Club, not just yours. If you go to TNT Club in pairs, split up when you hit the door and don't get together again until the meeting is over. Develop good program ideas so that the clubs can lose themselves in good activities and not sit around and be self-conscious thinking of themselves. Program ideas that I think are particularly good would be programs that work toward personal appearance improvement, interaction improvement, things that are just plain fun, things that are "catchy," and any program that is going to help these youngsters grow themselves. For younger clubs, I tend to prefer programs where they can do things rather than sitting and listening to speakers.

We must find new handicapped for these clubs. If the clubs start functioning more efficiently I'm sure that the handicapped will just appear, but we have to keep in mind that we need to keep new handicapped always coming into these clubs. We must maintain balance. We cannot let one club get so overloaded with retarded or blind that the other handicaps don't feel welcome.

Finally, we have to internalize all of this so that when we find ourselves at TNT Clubs we do these things automatically. It is impossible to remember all of the things that we have talked about. Practical application is the backbone of the Lookout program. After you have done these things you need to come back and read this material again, and realize that you have made progress in your understanding. Then we need to talk about it again.

Appendix B

Semantic Differential

Instructions

The purpose of this study is to find out how you would describe different kinds of persons. On each of the following pages there is a different person for you to describe. Your description can be made by marking the list of words on the page.

Take a look below to see how this is done. Each pair of words forms a scale. By making a check mark along the scale you can show how you would describe the particular person. Please make your marks according to what these persons mean to you. Do not compare your work with that of anyone else. There are no right or wrong answers.

Sometimes you may feel as though you had the same item before on the questionnaire. This will not be the case, so DO NOT LOOK BACK AND FORTH through the items to remember how you checked similar items earlier in the questionnaire. MAKE EACH ITEM A SEPARATE AND INDEPENDENT JUDGMENT. Respond as honestly as possible without puzzling over individual items. Respond with your first impressions whenever possible.

If you feel that the person named at the top of the page is extremely like one end of the scale, you should place a check mark as follows:

A person who plays the violin

worthless __X__:_____:_____:_____:_____:_____:_____:_____valuable

or

worthless _____:_____:_____:_____:_____:_____:_____:__X__ valuable

If you feel that the person is very much like one or the other end of the scale, you should place your check as follows:

A person who plays the violin

worthless _____:__X__:_____:_____:_____:_____:_____:_____valuable

or

worthless _____:_____:_____:_____:_____:_____:__X__:_____valuable

If you feel that the person is somewhat like one or the other end of the scale, you should place your check as follows:

A person who plays the violin

worthless____:____:_X_:____:____:____:____:____valuable

or

worthless____:____:____:____:____:_X_:____:____valuable

If the person seems a little like one side of the scale rather than the other, you should check as follows:

A person who plays the violin

worthless____:____:____:_X_:____:____:____:____valuable

or

worthless____:____:____:____:_X_:____:____:____valuable

IMPORTANT: Place your check marks in the middle of the blanks, not on the edges:

THIS NOT THIS

____:_X_:____:____:____:____X____:____

Remember: Never put more than one check mark on any scale. And also be sure to check every item. If you feel that a pair of words does not apply, or if you are undecided, place the check mark near the center spaces. Do not leave the line blank.

Do not spend more than a few seconds marking each scale. Your first impression is what we would like to learn about. We have found that you can work quicker if you first form a picture in your mind of the person mentioned at the top of the page, and after that, check each scale quickly. Continue working until you have marked each page.

Thank you very much for your cooperation.

Sample Page

A person who uses a cane to find his way

ugly____:____:____:____:____:____:____:____beautiful
strong____:____:____:____:____:____:____:____weak
confusing____:____:____:____:____:____:____:____understandable
fast____:____:____:____:____:____:____:____slow
familiar____:____:____:____:____:____:____:____strange
neat____:____:____:____:____:____:____:____sloppy
dirty____:____:____:____:____:____:____:____clean
small____:____:____:____:____:____:____:____large
nice____:____:____:____:____:____:____:____awful
passive____:____:____:____:____:____:____:____active
reliable____:____:____:____:____:____:____:____unreliable
dependent____:____:____:____:____:____:____:____self-reliant

Extremely like
Very much like
Somewhat like
A little like
A little like
Somewhat like
Very much like
Extremely like

Appendix B

Spatial Paralogic Attitude Inventory (SPAI)

On the following pages there are six groupings with six items in each group. Before each item there is a letter of the alphabet which stands for the item. Below each group of items there are six circles. For each grouping, place each letter (which corresponds to each item) into the circles. When placing the letters into the circles, place them in any order you wish. Don't use the order in which the items appear unless you feel that that is the order you want. There is no right or wrong way to respond.

B - Biologist
L - Brick Layer
T - Person who has Tonsillitis
E - Person with Epilepsy
K - Bank Teller
Y - Yourself

○ ○ ○ ○ ○ ○

P - House Painter
Y - Yourself
D - Deaf Person
K - Person with Kidney Stone Condition
H - High School Teacher
A - Automobile Salesman

○ ○ ○ ○ ○ ○

Y - Yourself
P - Photographer
C - Carpenter
D - Doctor
M - Mentally Ill Person
U - Person with an Ulcer

○ ○ ○ ○ ○ ○

I - Insurance Agent
H - Person with a Heart Condition
L - Lawyer
Y - Yourself
T - TV Repairman
R - Person with Cerebral Palsy

○ ○ ○ ○ ○ ○

M - Mentally Retarded Person
C - Chemist
Y - Yourself
R - Real Estate Salesman
D - Person with Diabetes
T - Truck Driver

○ ○ ○ ○ ○ ○

N - Person with Pneumonia
B - Blind Person
S - Store Manager
P - Plumber
Y - Yourself
D - Dentist

○ ○ ○ ○ ○ ○

Appendix C

Observation Instructions

General Techniques: You will be observing one handicapped individual per session. The codes are sequentially entered in one minute lines which are subdivided into fifteen second intervals. The first notation consists of the behavior(s) codes (see below). This is followed by the codes for the person(s) receiving or emitting the behavior, i.e. Handicapped talks to Female Lookout volunteer T/L_F: Male Lookout volunteer helps handicapped into chair PH/L_M: Handicapped laughs and talks to group consisting of both Male and Female Handicapped and Lookouts $ST/g_{\substack{H_{F-M} \\ L_{F-M}}}$ Make sure the order is correct (Behavior/$\text{Person}_{\text{Sex}}$). If the same behavior lasts for more than 5 seconds note this by drawing a line until that behavior terminates or the line ends. Do not continue a line onto the next line of the data sheet--these lines are only within one minute intervals. If no behavior occurs, leave the space blank; do not draw a line. At the end of each five minutes of observation write a brief description of what occurred. Include proximity to others in your description. That is, describe the physical scene as well as what occurs. Note the time of each observation sample.

Behavioral Codes:

Persons:
- H-Handicapped
- L-Lookout volunteer
- A-Adults (Sponsors)
- G-Group (no subscripts required)
- g-Subgroup (this must be subscripted with persons and sex)
- F-Female
- M-Male

Settings and Codes:

A) Unstructured situations (no planned activity other than refreshments): Collect 15 minutes of data. This may extend over several activities and may be interrupted by a structured activity.

Codes:
- T-Talking (talking to another person)
- X-Listening (listening to an individual or group)
- S-Laughing
- C-Crying
- PH-Physical Helping (physically assisting another person by other)
- PH-Physical Helping (physically assisting another person by Handicapped being observed)
- PT-Physical Touching (any physical contact excluding PH but including when objects are passed between people)

B) Structured situations (organized games, crafts, etc.): Collect 15 minutes of data. This may be interrupted by unstructured situations.

Codes: T-Talking
S-Laughing
C-Crying
PH-Physical Helping (by other)
(PH)-Physical Helping (by Handicapped being observed)
PT-Physical Touching

C) Business Meetings (Planned session to discuss programming--will be obvious): Collect as much data as possible up to 15 minutes. Use same sheet as for structured time (circle which activity is occurring-games/business).

Codes: T-Talking
S-Laughing
C-Crying
PH-Physical Helping (by other)
(PH)-Physical Helping (by Handicapped being observed)
PT-Physical Touching

On general comment note where individual was sitting, i.e. with other handicapped, lookouts, isolated, etc.

General Rules: These observations are confidential, please do not discuss them with anyone. Do not chew gum or eat while observing. Ignor all questions and physical contacts. Clipboards will be provided. Stop watches will be brought to the sessions and must be returned to your team leader following the session. You are expected to have a regular watch with you at all times. Observation sheets will be distributed at each observation site. PLEASE REREAD THIS INSTRUCTION SHEET PRIOR TO ALL OBSERVATIONS.

Important Things to Remember: Make sure your name, the club name and the first and last name of the person observed are on each sheet. Remember to code listen, X, during unstructured time. All behaviors except S and C must have people listed. All people must have sex subscripted. Be sure to write legibly and distinguish between g and G, A and H, etc. When taking reliability, do not look at each other's papers.

Appendix C

Coding Sheet
Structured: Games/Business

Observer__________
Observed__________

Location__________
Date__________

PEOPLE
A-Adult
G-Group
H-Handicapped
L-Lookout
F-Female
M-Male

BEHAVIORS
C-Cry
S-Smile, laugh
PH-Physical Helping
PT-Physical Touching
T-Talking

1				
2				
3				
4				
5				

Activity Description:

6				
7				
8				
9				
10				

Activity Description:

11				
12				
13				
14				
15				

Activity Description:

Appendix D

Background Information On TNT Club Members

Club Member's Name ____

How long have you known him (her)? ________________________________

Describe, in detail but briefly, the progress you have noted in him (her) since first coming to a club. (Use other side or additional pages if necessary.)

Discuss any aspects of the family situation that are relevant, changes in the family since club entry. (Use other side or additional pages if necessary.)

For each pair of characteristics below, make a check to show how you would generally describe this club member. Consider this person relative to his (her) potentiality and developmental level.

3-EXTREMELY LIKE the nearest description
2-VERY MUCH LIKE the nearest description
1-SOMEWHAT LIKE the nearest description
0-Characteristics are equally appropriate

does not apply	inadequate opportunity to observe		3	2	1	0	1	2	3	
		communicative								non-communicative
		dependent								independent
		extroverted								introverted
		leader								follower
		low participator								high participator
		mobile								not mobile
		non-verbal								verbal
		not sociable								sociable

____
Sponsor's Name   Date

Appendix D

Ratings of TNT Club Members

Club Member's Name ____

For each of the following pairs of characteristics, make a check to show how you would describe the club member during this meeting.

3-EXTREMELY LIKE the nearest description
2-VERY MUCH LIKE the nearest description
1-SOMEWHAT LIKE the nearest description
0-Characteristics are equally appropriate

does not apply	inadequate opportunity to observe		3	2	1	0	1	2	3	
		communicative								non-communicative
		dependent								independent
		extroverted								introverted
		leader								follower
		low participator								high participator
		mobile								not mobile
		non-verbal								verbal
		not sociable								sociable

To what extent did he (she) interact with others during today's session?

______ not at all ______ ______ ______ ______ a great deal

How does this interaction compare to his (her) general interaction level?

______ less ______ the same ______ more

Comments:

____
Sponsor's Name Date

Appendix E

TNT Member Questionnaire

Name of TNT Member____________________Age____Sex: M F Date________

Father: Name____________________Occupation: Title____________________

Business____________________Job Description____________________

Mother: Name____________________Occupation: Title____________________

Business____________________Job Description____________________

Name and Age of Siblings:____________________________________

Is member in school? Yes No Special Class? Yes No

Name of School________________________________Grade____________

If no, education completed: 1-6 7-9 10-12 some college college graduate

If no, is (s)he employed? No Yes: Full-time Part-time Title___

Business____________________Job Description____________________

What is the nature of the disability?________________________________

In what Outlook Nashville programs (e.g. TNT Club, Parks Program) has the member participated (be specific and give dates where possible)?

How did you hear about Outlook Nashville?_______________When?__________

Why did the member join the program?

Do you think the member will return to the TNT Club next season?
Yes No

What is the major reason for his/her return or non-return?

What has been the most significant contribution that the Club has made to the member?

What are some other contributions of the Club to the member?

What has been the most significant contribution that the Club has made to your family?

What are some other contributions of the Club to your family?

Specify to what other groups the member belongs:

How does the member currently spend his leisure time (list as many ways as apply)?

Are there other members of your family currently participating in any program sponsored by Outlook Nashville? Yes No

If yes, list names and programs:

What were their reasons for joining?

Any other comments on Outlook Nashville programs (suggestions for improvement, etc.):

ERIC Clearinghouse
JUL 1 0 1973
on Adult Education